VOLUME II - NUMBER 5 SEPTEMBER - OCTOBER 1961

PSYCHOSOMATICS

OFFICIAL PUBLICATION
OF THE
ACADEMY
OF
PSYCHOSOMATIC
MEDICINE

Annual Meeting of the Academy
November 1 to 3, 1962
Radisson Hotel, Minneapolis, Minn.

A
JOURNAL
EXPLORING
THE ROLE OF
PSYCHIATRY
IN THE
DAILY
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OF
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CD-960

PSYCHOSOMATICS

Official Journal of The Academy of Psychosomatic Medicine

Published by

THE ACADEMY OF PSYCHOSOMATIC MEDICINE

PHYSICIANS POSTGRADUATE PRESS

277 Broadway - New York 7, New York

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Contents

Editor's Page

The Annual Academy Meeting

The October meeting in Baltimore will long be remembered as a most significant milestone in the history of the Academy of Psychosomatic Medicine. Dr. George Sutherland, the Program Chairman and retiring President, spared no effort in gathering excellent talent for this occasion.

Unfortunately, this reviewer could not attend all the sessions because of committee commitments. Nevertheless, the comments of so many of those who did attend the ones he missed, warrant the above conclusions.

Just a few of the outstanding talks were those of Drs. Milton Rosenbaum, Eugene B. Brody, Blaine E. McLaughlin, Robert N. Rutherford, Edwin Dunlop, Bertram B. Moss, Albert A. Kurland, and Mr. Frank Hennessey. The last speaker provided a most delightful commentary on the "Chesapeake Bay Land of Delightful Living." Although its material would hardly help qualify the listener for board examinations in any specialty, it would certainly help considerably in providing a most relaxed attitude. Unfortunately, it cannot be published in *Psychosomatics*. This is truly a loss to its readers. Most of the scientific material presented during the three day session will eventually reach these pages, provided the authors submit their completed manuscripts.

No less important were the contributions of many of the discussants. Here again, one can only mention those who spoke when this reporter was within hearing range. Dr. Leo Bartemeier, in his discussion of Dr. Brody's talk on "The Ambulatory Schizophrenic as a Medical Patient," pointed up the role of the non-psychiatrist. Dr. Philip Bard, the discussant of Dr. Dunlop's presentation, reinforced the need for physiological parameters in the study of psychosomatic correlations.

What's an Editor?

Dr. Morris Fishbein, one of the oustanding medical editors, recently stated[1] that "editors vary from those that simply read articles and say yes or no . . . to those who actually write editorials, plan periodicals and stimulate the production of leading material. . . . The editor-in-chief takes full responsibility not only in selecting from the material submitted to him that which is suitable, but helps guide medical opinion. . . . Custom has now established for many periodicals long lists of members of editorial boards who in fact do little but lend their names or sponsorship."

In considering these editorial boards, Dr. Fishbein is reminded of the young volunteer who was asked whether he preferred the Infantry to the Cavalry. He inquired as to the difference. The recruiting sergeant said, "In the Cavalry you get a horse." "I prefer the Infantry," was the reply. "Why?" inquired the sergeant. And the answer was, "When the call comes to retreat, I don't want to be bothered with a horse."

Dr. Justus Schifferes, Director, Health Education Council, and a medical writer of repute, has stated[2] that "since there is no formal training for medical editors, each must seek his own way, guided by personal convictions of what is right and wrong."

Your Editor is hopeful that some of the readers of *Psychosomatics* will shed some light (or heat) in helping him formulate the long range goals of the Journal. The comments of members of the Editorial Board and Executive Council of the Academy would be most welcome. Please note that only material that is printable can be printed. —*W.D.*

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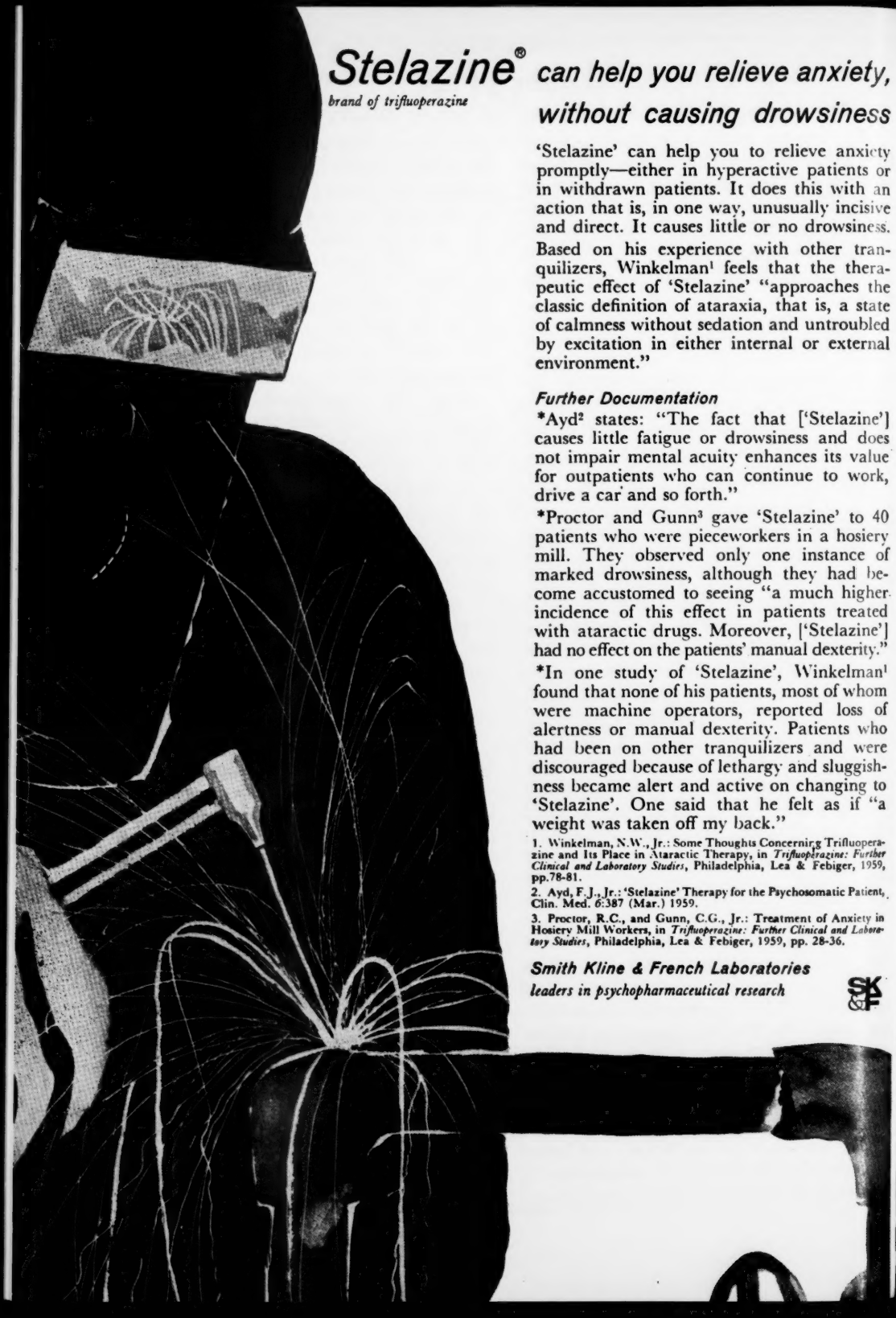
1. Bulletin of the American Medical Writers Assn. (Reprinted with consent of Dr. Fishbein.)
2. *N. Y. State J. of Med.*, Vol. 61, No. 20, pp. 3527-3533. (Reprinted with consent of Dr. Schifferes.)



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Further Documentation

*Ayd[2] states: "The fact that ['Stelazine'] causes little fatigue or drowsiness and does not impair mental acuity enhances its value for outpatients who can continue to work, drive a car and so forth."

*Proctor and Gunn[3] gave 'Stelazine' to 40 patients who were pieceworkers in a hosiery mill. They observed only one instance of marked drowsiness, although they had become accustomed to seeing "a much higher incidence of this effect in patients treated with ataractic drugs. Moreover, ['Stelazine'] had no effect on the patients' manual dexterity."

*In one study of 'Stelazine', Winkelman[1] found that none of his patients, most of whom were machine operators, reported loss of alertness or manual dexterity. Patients who had been on other tranquilizers and were discouraged because of lethargy and sluggishness became alert and active on changing to 'Stelazine'. One said that he felt as if "a weight was taken off my back."

1. Winkelman, N.W., Jr.: Some Thoughts Concerning Trifluoperazine and Its Place in Ataractic Therapy, in *Trifluoperazine: Further Clinical and Laboratory Studies*, Philadelphia, Lea & Febiger, 1959, pp.78-81.

2. Ayd, F.J., Jr.: 'Stelazine' Therapy for the Psychosomatic Patient, Clin. Med. *6*:387 (Mar.) 1959.

3. Proctor, R.C., and Gunn, C.G., Jr.: Treatment of Anxiety in Hosiery Mill Workers, in *Trifluoperazine: Further Clinical and Laboratory Studies*, Philadelphia, Lea & Febiger, 1959, pp. 28-36.

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PSYCHOSOMATICS

Official Journal of The Academy of Psychosomatic Medicine

A Psychosomatic Approach to Drug Research

B. E. McLAUGHLIN, M.D.*

As a physician and a psychiatrist, I have in the last two years become increasingly anxious about the trend which our society seems to be taking in regard to clinical medical research, and the gradually more authoritative tone which officialdom has employed in addressing the private physician about his obligations, responsibilities, and judgments in the handling of his patients. A good many articles in the lay press are suggesting that the average physician is completely the pawn of the monopolistic and inhuman drug trusts who manipulate the physician, and through him, his millions of patients to their own profit. Articles in our own medical literature suggest that we are to be terribly censored because we don't understand the complete action of new compounds as they become available through the F.D.A. for administration to our office and hospital patients. Let us look again into the concept of therapy as it has emerged through research in psychiatry over the past century. Perhaps we can shed some light on the problem of just what we are seeking to do when we administer a drug to a living patient.

For the past fifteen years, as Director of Psychiatry at the Woman's Medical College, I have had direct supervision over psychiatric clinics managed largely by residents and medical students from our Institution. In connection with the teaching of clinical psychiatry, I, as so many professors in recent years, have involved myself in numerous clinical investigative projects often involving placebos, and sometimes involving more than one compound. In addition to this, for a number of years, I served as a consultant for one of the major drug houses where my principal job was to evaluate studies done by various clinical psychiatrists around the country and help to decide whether or not a given compound was suitable for marketing. For the past four years, as Medical Director of the Medical Research Foundation of Philadelphia, I have helped bring private charity funds into academic psychopharmacologic projects.

Philosophically, therefore, I have myself firmly planted in both camps. On the one hand, I represent an academic institution to whom any implication of commercialism is the kiss of death. On the other hand, by associating myself with various commercial enterprises, as a consultant, I have at least been able to study the persons and the methods involved in making compounds available to the medical world. Perhaps this doesn't qualify me as an expert on therapy, but, at least, it gives me some practical experience in two opposing worlds. The ideas expressed in this paper, I believe, have evolved from that bilateral identification.

Let us start by looking back over the past century at the almost explosive force of clinical research in the Western World. The Civil War Centennial offers a neat starting point. The other night, in reading of the primitive surgical-medical conditions that were so prevalent in both the North and the South during the war between the states, the thought struck me as to how fast we have moved forward in

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Presented at the Annual Meeting of the Academy of Psychosomatic Medicine, Baltimore, Md., October 12, 1961.

what technical help we can make available to our patients, and, more importantly, how fast we have, as a culture, moved forward in what our people expect from the medical profession in the way of treatment. My Civil War interest led me to read again Strackey's famous biography of Florence Nightingale. As I look back on the Crimea, from my psychiatric professorship, I think that what Miss Nightingale brought to the soldiers was not so much "sanitation" as transference. In the mind of the English population, however, the key was in the term "sanitary," and it was this "sanitary" treatment that reformed the whole British and utimately the American military medical approach. In my terms, Florence Nightingale was a clinical investigator in the problem of battleline medical care. Why was it that her achievement struck the Western World in a way which has irrevocably changed medicine since her lifetime?

Let us come down to our own century and look at the great experiments in nutrition which took place in the laboratories of Banting and Best and other immortals of the same period. Out of this work developed a completely new attitude toward nutrition of the multicellular body; internal medicine grew enormously from the data which accumulated in this very fruitful period of medical research. At the same time, a newly awakened pharmaceutical industry started to grow as a partner in providing the tools for the newly intensified battle against starvation and death. Investigation in pernicious anemia led to the vitamins, and, eventually in the late twenties and thirties, to tremendous expansion of the clinical use of vitamins as therapeutic agents.

The next forward stride seemed to involve itself around clinical investigations into the antibiotics in the late thirties. All during World War II the pharmaceutical industry was working at top speed to add more facilities for the manufacture of various antibiotics. And, in this era, antibiotics were the mainstay of clinical therapy not only in the military, but also in civil practice. In the early fifties came the investigation into the use of the neuroleptics, which, in less than a decade, now represent a sizeable share of the total drug sales in this country and make up a portion, if not the whole, of the clinician's therapeutic approach to every other patient. In the late fifties quickly came another forward thrust with the development of the antidepressant compounds, and, it already looks as if their use is rising rapidly.

How, then, would a wide awake practitioner have approached the problem of therapy in his individual patient at these different periods? In 1890 a cornerstone of his therapy would have been "sanitation." In 1930, whatever else the patient was given, he would have had, as a regular part of his therapy, large dosages of various vitamins. In 1942 the patient would have been treated by antibiotics for almost every routine medical complaint. By 1955 the patient would certainly have been given some tranquilization, and by 1961 it looks as if he will not be fully treated unless given some antidepressant. Shall we then conclude with some of our lay censors that the doctors are a bunch of sheep who treat according to medical fashions, created largely by the advertising departments of drug houses, or should we conclude that therapy is simply not a specific proposition? The latter fits more closely with our psychiatric training and tradition. The clinical therapist, at any one time, makes available to his patient the best therapeutic measures which have emerged in the world of medicine at this particular era. No one is really sure of the therapeutic efficacy of a given compound in a given patient. The blunt truth is that no one can define "therapy." About five years ago, I went to hear Dr. Wikler and his colleagues from Lexington lecture on investigations with that tried and true compound, morphine. After two hours I was convinced that everything I had been

taught in medical school and practice about morphine was completely erroneous. I may be misquoting our good colleagues, but, according to my recollection, Wikler felt that nobody had yet really understood the primary therapeutic effect of morphine; the addiction to morphine, he seemed to conclude, lay partly in the patient as well as partly in the drug. Stewart Wolf has recently written some fine papers on the use of placebos as therapeutic agents. Certainly all of us have confirmed some of these observations from our own investigations. A so-called placebo is not an inert substance when given to an ill patient by a figure who represents, in his essence, medical therapy. Let us then see if we can't draw some conclusions which might be helpful in the applications of new information from clinical investigations to the therapy of our own patients.

First, let's face up to the fact that the major drug houses represent a partner in post graduate medical education and clinical investigation today in this country. Let us say that our Department at Woman's Medical College wishes to do clinical investigation. We have three principal sources of help in setting up such a program. The first source is the government; the second is private foundations, and the third is the drug industry. Every school, and most wide awake hospitals today, utilize all three of these sources to the greatest possible extent. Without the help of the pharmaceutical houses, I am sure that many of our graduate assistants would not have any salary. I am sure that almost every major hospital in this country has been partially supplied with needed scientific equipment by the drug companies. I am not at all sure why this should be such a hush-hush proposition.

Banting and Best obtained grants from private sources. Does that imply that insulin was brought on the market largely to make money for private drug companies? The investigations of the antibiotics, and in later years, the various ataractic and antidepressant compounds, have been financed, at least in part, by drug houses. Does that imply that these compounds have found a place in the therapeutic armamentarium of the average physician because of advertising rather than science? Almost every medical scientific meeting held in the United States today is financed, in part, by the old line drug companies. Does that mean that these meetings are less scientific? Are doctors in general so easily purchased that they color their results, and even the drug they prescribe, in favor of a drug house which gives them an honorarium? Isn't it more likely that the average clinical investigator, and gradually the average practitioner, is accepting the pharmaceutical industry as a partner in his day by day education and therapeutic responsibilities?

Just as our department looks to the drug houses for the backing of clinical investigation, the medical societies look to the drug houses for help in putting on important meetings and disbursing critical clinical information. Are we then such children that we prostitute ourselves and enslave our patients with needless remedies for the enrichment of the drug industry? The answer is, that even if we were small enough to individually succumb to such measures, the tyranny of such a therapeutic approach would quickly break down in the hurly burly of clinical practice on a private basis. Where medicine is practiced freely, the doctor gives his best therapy to each and every patient at any time, and under any circumstances, in the full light of the judgment of his society and ultimately, the authority of the civil courts. If sanitation therapy is the best tradition of the time and the best that is available to the patient, in both the patient's mind and the physician's mind, this is obviously the treatment of choice. If a neuroleptic is helpful to the patient in a way unlike anything else, and this is established in both the minds of the patient and the physician, this then is the

treatment of choice. It has been stated in the lay press that perhaps we ought to have a law in which it is spelled out that a drug's therapeutic efficacy must be proved before the drug is placed in the hands of the thousands of office practitioners across the country. I offer to you, that sanitation therapy has never been proved to be clinically efficacious. It has proved to be safe. Nutritional therapy, antibiotics, neuroleptics, have never been proved to be therapeutically efficacious. They have been proven to be safe.

Let us look for just a moment at how a new drug finds its place in the symphony of already existing compounds. First, after a compound emerges from the animal research laboratory, and has had the usual toxicity studies, it is placed in the hands of from four to twenty seasoned investigators who run human pharmacologic experiments. These include dose range studies, acute and chronic toxicity studies, and, importantly, clinical observations are made as to its *potential* therapeutic effects. If the drug survives these initial studies, it is usually farmed out to a large group of clinicians who have already been handed the dose range and the therapeutic possibility of the compound. They can give, within a year or so, a pretty shrewd judgment as to its safety and area of application. It is usually at this point that the Federal Drug Administration is called upon to certify the compound as safe and allow its marketing. Almost all practitioners are sophisticated enough, today, to know that with the large advertising budgets that are made available to new compounds, there is almost always a splurge of enthusiasm when a new compound actually is detailed and placed in the hands of the mass of practitioners. Within a relatively short time, we are also sophisticated enough to know, that a reaction sets in as the wave of initial enthusiasm subsides and difficulties emerge. The drug then vacillates up and down in sales until it finds its natural place in the vast group of similar agents available at the touch of a pen to a prescription.

Fresh advertising money can always focus some interest on the compound and raise it to an unnatural level for a short period of time; but, inevitably, as the advertising slackens, the drug's position falls back to its general overall competitive spot. Literally hundreds of compounds are placed on the market and this cycle is so routine that Madison Avenue can almost draw it in advance. Every once in a while, however, something like the neuroleptics emerge which do not take this pattern, but simply keep on climbing as they are made available to more and more practitioners and utilized by more and more patients. If we can do this, with a new neuroleptic, why can't we do it with a hundred other drugs when we have the advertising budget? The answer is that therapy is something between the patient and his doctor. I can't define exactly what it is that I give my patients. I am sure no patient has yet defined perfectly what it is that he gets from his physician. I know that I need assistance in the giving of this something to my patient. Sometimes I find this assistance from the drug industry. Sometimes I do not. Ultimately, I, as one of the two hundred thousand active clinical physicians in this country decide what is successful in therapy and what is not. The drug investigations that are done by professors such as myself in our clinics (and gentlemen, I have had the experience on one occasion of giving a compound to a living human being for the first time) are very interesting to us as professors, but really not of much consequence, except as a sign post to real clinical investigation. This comes after the drug has been placed on the market in a freely competitive situation, and either makes or breaks itself running against all comers.

I make a strong plea that we allow this situation to continue to emerge in an evolutionary way, and not limit, by artificial

controls, the free use of compounds in the ever increasing search for therapy.

Let me end on the note that Congressman Volstead had a brilliant idea that Ethanol was not a useful compound for the United States. It sounds unbelievable, but he convinced a majority of his fellow citizens that he was right. There is no doubt that Ethanol is not a useful therapeutic compound for certain individuals. I think Congressman Volstead's experiment, however, shows that it is more useful than dangerous. This, by no means does anything to distract from Ethanol's danger. It merely shows that in a free society free people choose what they wish in the way of refreshment. Do patients and doctors have less right to choose "therapy"? I do not wish the responsibility of holding back from mankind any compound which might be useful in helping alleviate human illness. I want a board of my colleagues to check into the potential dangers of every such compound, and disperse as widely as possible, through scientific media, knowledge about them. I do not wish any board, either professional or lay, to ever get into a position where it can say what is therapy between a patient and his own living human physician.

108 East Gowen Ave., Philadelphia 19, Pa.

An economy can afford to spend whatever it desires to spend. All that is necessary in order to spend more on one thing is that we spend less on something else. We would have to give up something . . . if expenditures on mental illness were increased. . . . What society can spend depends on the value system that society holds to. It is obvious that society can spend much more on mental illness. . . . Whether or not it chooses to do so is another question.

Dr. Rashi Fein
Economics of Mental Illness
Basic Books, 1958, p. 137.

Group Psychotherapy by the Non-Psychiatric Physician

VICTOR J. LOCICERO, M.D.

The purpose of this paper is to show that a physician with a practical knowledge of group processes has a great potential for benefiting the patient, the community and himself. Three aspects of this triad, the patient with diverse problems, the physician from whom help is sought, and group psychotherapy are analyzed. First, the inherent positive aspects are examined; these are present and require no additional effort or skills on the part of the physician. Second, the benefits derived from group therapy by the patient, the physician and the community are considered. Finally, the skills and knowledge the physician should possess to best utilize the existent factors are analyzed.

Inherent Positive Aspects

A physician must constantly deal with the tendency of patients to use him for counseling and guidance on a variety of problems that may range from carbuncles to legal advice. The fact that these problems are brought to him indicates that a positive physician-patient relationship either exists or is a potential. This is a basic step in doing effective psychotherapy, for without this relationship the most skilled therapist can do little to help a patient.

The family physician of the past, functioning in a small community, in close contact with the patient, the family, and other professional people in the community, used this relationship to treat the "whole person." He also used this positive relationship with groups when he gathered the family together to explain to them, to reassure them, or to mobilize their help during the illness of a family member. He helped in a broad spectrum of ways, often working closely with the minister and lawyer, in order to assist his patient. His patient was helped to adjust to the community when the physician interceded in his behalf to explain to the neighbors that his illness was not purposefully directed against them. This led to acceptance of the patient and to additional aid from the neighbors. In a sense, then, he was also a group therapist working with emotional and social problems in a group setting.

Today, a good deal of emphasis is placed on treating the "whole person." The interdependency of biological, psychological and social factors and the implications for treatment are inescapable. A seemingly physical condition may not respond to treatment unless the emotional problems are alleviated. Or, often the basis of physical symptoms is obscure unless one considers the emotional or social problems. In his pursuit of the treatment of the "whole person," the family physician of the past was faced with an exhausting job because of the limitations of time and lack of organized knowledge and techniques for dealing with human behavior. Undoubtedly his energy and time were greatly drained by doing things for the patient which the patient might have learned to do for himself, had he felt more secure and less helpless.

I believe that today, through the application of existing knowledge of human behavior and psychotherapeutic techniques, the needs of the total patient can be met in a more enlightened and systematized manner than was possible for the family physician of the past. Group therapy can serve as the medium for accomplishing this. Using the experiences of other people with similar problems, the patient can be helped to develop his own personality more fully. Many of the problems for

From Temple University Medical Center, Philadelphia 40, Pa.

Presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine, Philadephia, Pa., October 14, 1960.

which he seeks help can in this way either be resolved or dealt with by the patient. In other words, he can be helped to help himself. The non-psychiatric physician is often in a better position to help with emotional and social problems because of his position of greater accessibility to the patient and because often the patient is not ready to accept referral for psychiatric treatment.

In addition to the strong therapeutic force which exists in the positive physician relationship, there are other positive aspects which can be therapeutically utilized through group techniques. Group therapists utilize the knowledge that people want to help and enjoy analyzing each other. A good deal of time is spent daily in discussion of what another person is like and why he is acting as he does; various causal speculations are made, such as marital or financial difficulties, or improper rearing. Another important fact, widely discussed in the literature, is that group participation *for any purpose* often results in improvement in the handling of emotional problems and in the relief of physical symptoms. We know that during stressful times when people group together for mutual aid, alleviation of severe neurotic symptoms is experienced. Obsessive compulsive personality disorders, usually difficult to treat psychiatrically, show considerable improvement under these conditions.

Some time ago, Amster[1] agreed to hold discussion groups in the community at the request of housewives, students, and parents. The conclusion reached then was: "given almost any group situation with some therapeutic direction, the individual can diminish and often dissolve some of his doubts, anxieties and guilts, and become more realistically self-accepting and concomitantly more emotionally secure." Another study was carried out in which a therapist told his group he would be listening to them behind a screen. The group then proceeded to discuss their problems without him, with consequent improvement. Another observation that is utilized is the natural tendency for humans to form groups. This desire for socialization is clearly seen when strangers meet. There quickly results the search for common interests, common problems, or common cultural background. A feeling of closeness ensues which dispels loneliness and insecurity and often leads to further mutual aid. Because of the tendency of people to use groups to seek solution of a problem or for the satisfaction of other needs, therapy in groups holds a further attraction. It is a method which is closer to the usual way used by people; if there is a family or community problem, people get together and discuss it. These examples may be considered under the more general observation that people have a constructive influence on each other. With some skilled therapeutic direction, this influence can be enhanced.

The group therapy literature contains many references to the great variety of problems helped by group methods. Further, the methods used vary greatly, as do the backgrounds of the therapists. Group psychotherapy is generally considered to be a technique reserved for those with specialized training. However, other methods such as group counseling or guidance, although considered less intensive, are known to be effective and can be used by therapists with less training. Although much more has to be known about the relative effectiveness of various methods and more basically, about the process of psychotherapy, most therapists hold to these distinctions. The background of group workers ranges from psychiatrist to trained clerical worker under supervision in a correctional institution.

Group therapy has been reported successful in many types of problems which physicians encounter daily. There are emotional problems related to such chronic disease as diabetes and tuberculosis;

problems centering around pregnancy and child care; problems associated with alcoholism, obesity, allergic and dermatological conditions, epilepsy, tension headaches, essential hypertension and peptic ulcer. In addition, there are marital problems, problems related to change in working status such as retirement, and problems of young people, such as adolescence, and initial adjustment to work or college. Some of these are successfully being treated in groups by some allergists, dermatologists, and obstetricians. Indeed, one of the pioneers of group therapy was Joseph Pratt, an internist, who first used group methods in 1905 in the treatment of tuberculosis, because he lacked time to see the many patients who needed help. He noted that patients seen in groups did better than other patients. He then obtained further psychiatric knowledge and skill and developed the use of group therapy for neurotic conditions, which he reported as constituting 36% of 2,000 first admissions to the Boston Dispensary.[2]

To extend and help clarify the references made to the therapeutic potential of the group, I would like to give a brief description of the group atmosphere and some of the therapeutic forces in operation. The group leader brings together a number of troubled people with a variety of problems. Usually we see people who are anxious, fearful, resentful, and inhibited. They feel inferior and are in despair about themselves and the future. They are indecisive and not sure of what troubles them. They are also fearful of taking action because of previous failure or unsatisfying experiences.

The group therapist sincerely accepts them as people who basically can and want to adjust to society, but who have been unable to surmount the obstacles they have encountered. He establishes an accepting, warm and permissive atmosphere in which each can assert and express himself. In this way he helps relieve the restraint to expression of feeling and thoughts usually felt by people in other social settings. This is necessary to release tensions and bring to light the conflicts present in each individual. The individual further relaxes his inhibitions because he feels accepted by the other members and because of their spontaneous expressions. The mere expression of feelings leads to a more comfortable state. The fact that others have similar problems and feelings is further reassurance for him. As he continues to communicate he is helped by the other members to clarify his areas of conflict. He learns how he distorts reality by seeing in others the same distortions he possesses. Further, he observes repeatedly patterns of behavior leading to difficulties. What he does not notice, other members bring to his attention. He learns new ways of expression and of dealing with situations. While he is learning and testing his new modes of behavior, he is supported by the other members. He realizes his needs more clearly and sees how they are related to his behavior. He learns how he reacts to certain kinds of behavior displayed by others and of the reactions he creates in them. Increasing his ability to empathize with others helps him to relate more appropriately to others as human beings rather than as objects. This results from observing reactions in others and from being aware of similar reactions in himself.

The group setting therefore offers an opportunity for an individual to examine his characteristic ways of behavior with the help of others, so that more appropriate and realistic behavior can be achieved where necessary. In the process he releases feeling, clarifies his problem, learns about his social personality, and tests new behavior. Ultimately he feels more comfortable, gets along better with people and faces his reality situation with greater confidence. At the same time there often is experienced alleviation of other symptoms such as headaches and chest-pains. This is a very brief descrip-

tion of a very complex process. But it does reflect some of the impressions reported by group workers.

Benefits of Group Therapy

The patient is helped by the correction of existing emotional problems and by the alleviation of symptoms. Further benefit results because the physician can practice preventive medicine in the biological, psychological and sociological spheres. The patient's fee can be lowered because the physician is able to treat many patients at one time.

The physician saves a great deal of time because he can treat 5 to 10 or more patients at the same time. He also can more economically and effectively direct, teach, and interpret various medical regimens in long-term cases. In addition, education of patients can help clear up confusion and dissatisfaction with respect to medical practice. Lastly, the practice of preventive medicine becomes feasible and more effective since patients are seen in groups for a definite period of time.

The community benefits since physician's offices become small centers where preventive medicine is practiced. This can help lead to a better informed, healthier community both physically and mentally.

Skills and Knowledge Needed

The physician should possess basic knowledge of personality development, psychopathology and group psychotherapy. He will then have acquired knowledge of how to utilize concepts of resistance, transference, empathy, needs, and of the effects of the interplay between the individual and his social setting.

Ideally this can be obtained through brief courses at various medical centers. Local group psychotherapy associations may be contacted. If these are not available, self-study may be used. The degree of preparation would vary with each individual depending on previous training and experience. In either case, collaboration with a specialist for periodic discussion of group progress and problems is advised. The specialist can also help in acquiring the necessary background. Ultimately, the physician could function independently at a certain level of training, such as group counseling and guidance, or go on to obtain the necessary knowledge and skills to do intensive psychotherapy.

SUMMARY

Three aspects of the triad, the patient with diverse problems, the physician from whom help is sought, and group psychotherapy are analyzed. The therapeutic potential inherent in the triad is examined. The benefits to the patient, physician, and the community are analyzed. Lastly, the skills and knowledge which the physician should possess are considered.

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Psychodynamics in Hypnosis Failures

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Ainslie Meares, the new president of the International Society Clinical and Experimental Hypnosis, states: "Since the war, we have witnessed a great revival of the use of hypnosis . . . we are now faced with a more difficult and less spectacular phase of consolidation and evaluation . . . emphasis should now be on the evaluation of the psychodynamic mechanisms rather than on the success of the venture . . . until we are secure enough in ourselves to publish accounts of failures we cannot hope that our colleagues will have real trust in us."

The following cases (very condensed) will serve to point up psychodynamic mechanisms, partial successes, and failures in neurotics and psychotics treated with the additional aid of hypnosis.

Case 1. A. A. was a 24-year-old white, single male, physical education school teacher who complained of a compulsion to pull out the hair on the back of his head. It was nearly a year before he sought help. After his family physician, a dermatologist, and a psychiatrist failed to help him, he was referred for psychiatric and hypnotic treatment.

Hypnosis was easily induced. In the first two hours it was learned that the patient always pulled his hair with his right hand. He had many violent arguments with his father about this habit and would get very nervous after these arguments, and would calm down only after masturbation. He then felt guilty. He had stimulated himself a good deal as a child and as a teenager, stopped while in college, and began again soon after he had started pulling at his hair.

During the next two hours, while in a deep hypnotic trance, he was able to express much hostility toward his father. He admitted a great deal of guilt and shame about his self stimulation and wondered if the hair pulling could be a way of punishing himself. He accepted the idea that creating the bald spot was a form of punishment; that he brought on the wrath of his father, and then masturbated in defiance which was followed by pulling his hair because he felt guilty.

The next hour, under deep trance, revealed that his father wanted him to get married. This patient had no girl friend and was not anxious to get married. He suddenly came up with the idea that the bald spot keeps him away from girls. He seemed pleased with this idea but still wanted to stop pulling his hair because he felt ashamed in his classroom.

On a waking level he could recall his recitals under hypnosis and was able to discuss them fully. His major sport was basketball which he coached and played as often as he could. He enjoyed the company of his fellow players, on and off the court, enjoyed working with boys. He always felt uneasy with girls. Other data suggested he had a latent homosexual tendency. There was no history of sexual intercourse.

During the next three weeks the patient obtained no relief despite his new insight and understanding. Direct suggestion gave only partial relief. The patient stopped pulling his hair during the day but resumed in the evening. Finally it was suggested that when he brought his hand up to pull his hair he would bring his fingers to his mouth and bite his nails instead. This worked very well. The patient felt he had achieved a cure. Actually he had only substituted a more socially acceptable habit for a less acceptable one. He had considerably less shame and guilt, fewer arguments with his father. He avoided dating girls, and was still punishing himself by destroying the nails of his right hand.

This patient had magical expectations. His latent homosexuality was not explored. The patient was unwilling to tackle his hostility toward his father and dismissed an attempt to discuss girls with, "I'm not ready for marriage so there's no use talking about girls." He also refused deeper probing of his personality. He was content to accept this therapy for what it was—a superficial aid in changing his symptom.

Case 2. An obese, 45-year-old, white, married physician in active practice was referred by a psychiatrist who had seen him in psychotherapy infrequently over a period of about ten years. The patient wanted help in losing weight. He was described by his psychiatrist as an orally dependent individual, managed by his authoritarian wife, and generally unhappy about his working conditions. He was induced easily and quickly into a deep trance. He gave little information about his feelings, stated his sex life was satisfactory,

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that he had to suck on an empty tobacco pipe to keep down his tenseness and that he would go with very little food all day and then go on an eating binge every evening. He was tired of dieting; amphetamines upset him; he admitted he was seeking a magical cure through hypnosis. Direct suggestion about control of eating "worked like magic" for the first week so that he lost seven pounds. The second week he lost three more pounds. Thereafter, because of stormy weather or his work schedule, he missed sessions, went back to his old habits, regained the ten pounds, and became discouraged.

Failure here must be attributed first to the patients craving for magic. Although it may appear to be so to the uninitiated, hypnosis is not magic. Second, he refused to discuss his personal feelings and desires. Third, he was not motivated to lose weight.

Magical expectation, lack of proper motivation, and unwillingness to explore deeply into his reasons for tenseness and pain-dependency feelings are contra-indications for the use of hypnosis. Prior psychiatric treatment did not prepare him for hypnosis. It seemed, in fact, to aid his expectation of magic.

Case 3. ***B.B.,*** a 19-year-old college freshman, white, single male admitted to a state hospital for a first acute psychotic episode. He was diagnosed as schizophrenic, catatonic type. He was very frightened, withdrawn, and for the first two weeks refused to speak to anyone.

During the third week he listened attentively when hypnosis was explained to him and how it might help him. He was easily induced into a deep trance and talked for the first time since admission. He stuttered and stammered. It was suggested that he would be able to talk and would be able to work with the doctor on both waking and hypnotic levels in an effort to relieve his speech defect. Tape recordings of his speech patterns were made.

Several weeks of training taught him to replace the muscle tenseness of his speech apparatus to the fingers of his left hand. When he began to talk he would make twitching and contracting movements of the fingers. When he stopped moving his fingers he stuttered. He then learned to keep his left hand in his pocket where they could twitch unseen while he managed to speak reasonably well. He followed his improvement on the tape recorder and as his speech improved he became less withdrawn and afraid, became more social on the ward, more rational, with improved insight and judgment. He would still stutter over words that began with F, S, C, P, and T. No attempt was made to probe deeply into his sexual conflicts, but it was evident from much of what he said that he had many.

His clinical improvement was very rapid. In three months he appeared so well his parents obtained his release. Hypnosis did not cure him; it helped to give him a rapid relief of a terrible speech defect by transferring the tensions and spasms of his vocal apparatus to the fingers of his left hand. The underlying causes of his stuttering were not changed. This superficial attempt to help him to better adjust socially may have speeded his recovery from his psychosis. No attempt was made to treat his psychosis with hypnosis. When last heard from he was still twitching his fingers, stuttering on occasions, and was back in college.

In this case hypnosis helped the patient to transfer from a less socially acceptable habit to a more acceptable one. This transfer made possible the lessening of a marked social defect. His improvement helped him to better his social contacts, build up some pride and self-esteem, decrease his hostility, and return to realistic living. It was hoped that hypnoanalysis might be started later but he left the hospital.

Hypnosis used judiciously, as in this case, was not a total failure nor a total success. It was an adjuvant therapy which might have been more useful over a longer period of time. Both the parents and the patient wanted to leave the state hospitals behind them as quickly as possible. From their point of view hypnosis was a success; from the therapist's point of view it must be thought of as a partial failure.

Case 4. ***C.C.,*** a 16-year-old high school junior, white, single male was admitted to a state hospital for an acute psychotic breakdown. His diagnosis was schizophrenia, catatonic type. One and one half years of therapy, which included individual and group therapy, insulin coma therapy, ECT, and pharmacotherapy produced no improvement. At this time he was spitting at everyone; he was profane, dirty and careless in dress, and at times destructive.

He submitted willingly to hypnosis and went into a light trance. When asked why he always carried one or two books which always upset him and which he never read, he became extremely restless and anxious. The same response followed questions about his spitting.

Slowly and gently this patient became able to relate under hypnosis; he stated that the spitting was due to evil thoughts that arose in his mind, moved down into his salivary glands, then came out as a profuse, bitter, bad tasting spit which he had to eliminate. The book he always carried represented his mother. When he opened a book, or saw an open book, it made him think of his mother spreading her legs apart.

The black print represented the pubic hair. The evil thoughts were that he wanted to have sexual intercourse with his mother and spitting was the only way he could get rid of the thought.

His progress was slow and improvement minimal. Hypnosis sessions were stopped. Many weeks later he asked to be allowed to go back to school because he was now able to read books. The Board of Education provided a teacher who came to the hospital. Eventually the patient took a biology regents examination and passed. His spitting was now only an occasional episode. He was a little more careful about his dress, seldom used profanity, but continued to have a great deal of suppressed hostility.

Now, one year after hypnosis was first used, the patient is living at home and attending school. Hypnosis was used chiefly to overcome his resistance in talking about his symptoms. It helped in making him more accessible. No attempt was made to cure his schizophrenia.

Case 5. D.D., a 20-year-old white, single male, admitted to the state hospital with the diagnosis of schizophrenia, catatonic type, failed to go into coma with 770 units of insulin while on insulin coma therapy.

In a research project designed to study this problem, it was felt that patients who failed to go into coma with high doses of insulin (500-1000) units were poorly motivated for this treatment.

Hypnosis was tried in seven young male schizophrenics who failed to respond to 500 or more units. Six of these young men, following two or three sessions of hypnosis were able to go into insulin coma daily, for the remainder of their course of therapy, on 250 units or less. One of these seven (D.D.), who was able to enter a medium deep trance state, did not respond like the other six. He was hypnotized four times when alone and four times in a small group with two other young men. He continued to take 300 to 700 units of insulin without going into coma. The therapist in charge of the insulin unit finally dropped him from the group.

Why did hypnosis fail in this one patient and help the others? One cannot be certain, but if proper motivation toward treatment was a factor, this contributed, for this boy was not properly motivated (this was quite evident in talking with him) and the hypnotherapist failed to change his feelings.

CONCLUSIONS

These brief case reports point up the fact that hypnosis is not a miracle; that although it seems to produce "magical" results in some, it may not work with the same degree of effectiveness in others. The individual is still an important variable; satisfactory results of failures are to be judged only when hypnosis has been carefully used by one trained in its use and experienced with psychiatric problems.

Many successes have been credited to hypnosis; the failures, too, are important and should be studied.

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One of the most important early problems in psychotherapy is helping patients to learn to tolerate the initial anxiety without amplifying it in a vicious cycle.

Harley C. Shands, M.D.
Thinking & Psychotherapy
Harvard University Press, 1960, p. 126.

The Management of Anxiety in Allergic Disorders — A New Approach

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Because of the psychosomatic relationships in allergic disease states, it was natural for the allergist to become interested in the role of tranquilization in the treatment of the allergic patient. Emotional factors and anxiety are known to modify and influence various allergic diseases. We do not believe that they are primary, or direct etiological causes of these ailments, but it is felt that they accompany the allergic state as in other prolonged illnesses. Since they act as contributory or associated factors, these symptoms should not be ignored.

For example, there are so many causes of chronic urticaria, such as drug allergy, food allergy, infection and psychic factors, that intensive, time-consuming studies are required before a proper etiological diagnosis can be made. Eisenberg[1] reported emotional factors were implicated in 64 per cent of his series of 50 patients who had chronic urticaria.

Many asthmatic patients have the feeling of suffocation and impending death because of their inability to breathe. It is only natural that they manifest symptoms of anxiety and restlessness between attacks, because they are apprehensive as to when the next attack will come and whether they will survive.

Also, in patients with various types of allergic dermatitis and contact dermatitis with extreme itching, it becomes necessary to use some type of tranquilizer to relieve these symptoms which add to their anxiety and irritability. Those patients who have gastro-intestinal allergies frequently experience periods of extreme anxiety and tension even though they are maintained on rigid anti-allergic diets. Tranquilizers or sedatives are needed in addition to their allergic management.

McGovern[2] states that in the therapy of acute attacks of asthma in infants and children certain basic procedures stand out as of prime importance: 1) Institute therapy early in an attack; 2) Perform bronchodilation; 3) Use sedation (this includes the parents, when indicated); 4) Maintain adequate fluid intake; 5) Combat existing infection vigorously; 6) Eliminate immediate sources of potent allergenic substances.

In outlining treatment of various allergic states, particularly status asthmaticus,[3] I have previously stated that sedation rates high on the list of treatment. Morphine, codeine, demerol and atropine, however, are especially to be avoided.

Numerous new tranquilizers are being used at present; however, serious side effects occur with some of them.

Chlordiazepoxide is one of the better-acting tranquilizers, but such side effects as severe acne, dermatitis and urticaria are at times encountered, necessitating discontinuance of its use.

Meprobamate has addicting properties and withdrawal symptoms are reported after stopping the drug. Drowsiness, allergic reactions, such as an itchy, urticarial or erythematous, maculo-papular rash, may occur. Acute non-thrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. More severe cases observed may also have fever, fainting spells, convulsions, angioneurotic edema and bronchial spasms.

Acetophenazine dimaleate has caused

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agranulocytic angina, Parkinson - like symptoms and other extrapyramidal reactions, as well as drowsiness.

The present communication reports on my experiences with hydroxyphenamate,* a new tranquilizer soon to be commercially available. In this series of 92 patients, 200 mg. tablets of hydroxyphenamate were given three or four times a day, depending on the degree of anxiety or agitation.

They were kept on this therapy from a period of three days to 16 weeks and the tablets were discontinued when the anxiety symptoms were relieved. This clinical study was started in July, 1959, and continued to the present time.

This series of patients represented various allergic conditions associated with anxiety and/or tension, such as contact dermatitis, bronchial asthma, hay fever, urticaria, allergic dermatitis, etc.

Forty-two patients in this series were males (age range 25-63 years) and the balance (50) females (age range 19-67 years). Sixty of the patients received one tablet three times daily, while the balance were given one tablet four times a day.

The clinical response obtained is presented in Table I.

TABLE I

Clinical Response to Hydroxyphenamate

Excellent	86
Good	5
Fair	0
Poor	1
Total	92

*Listica, a product of Armour Pharmaceutical Company, Kankakee, Illinois.

There were no untoward reactions noted in the 92 patients reported. One patient had to discontinue medication because he complained of being depressed after taking the tablets for three days. However, the same depression was obtained after prescribing two other tranquilizers, meprobamate and chlordiazepoxide.

In the patients with urticaria and allergic dermatitis it was noted that there was less itching; they were not as emotional and they felt more relaxed.

It was noted that asthmatic patients receiving hydroxyphenamate in addition to conventional therapy (hyposensitization, ACTH, antihistamines, steroids, etc.) responded much better than did those patients on conventional therapy alone.

SUMMARY

1. Patients who manifested symptoms of anxiety, restlessness and irritability secondary to an allergic disorder, were controlled with hydroxyphenamate.

2. Hydroxyphenamate was well-tolerated with complete absence of side effects (except for one case cited).

3. In addition, hydroxyphenamate was found to be more effective than all other tranquilizers previously prescribed.

4. Predicated on the beneficial effects obtained in this study, hydroxyphenamate is considered to be a valuable adjunct in the management of such patients.

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Short Term Psychotherapy

JAMES L. MCCARTNEY, M.D.

Any discussion of psychotherapy must begin with the realization that all practitioners use it whether they realize it or not. They may explain the nature of the illness or operation, or they may spend considerable time reassuring the patient. At least 80 per cent of all illness is colored by psychogenic factors, and no illness can adequately be treated without taking into account the underlying personality. Faith and trust in the physician or surgeon is a big element in recovery.

It is well to define what is meant by short term psychotherapy, for the orthodox psychoanalyst would consider psychoanalytic therapy short term if it lasted less than three years at three times a week. Many effective therapeutic psychoanalyses last less than a year at once or twice a week, and yet the general physician would consider this technic long term therapy.

In many cases, the type of personality with which the physician has to deal, the stubborn nature of the condition, whether physical or mental, or the existing insuperable environmental factors make the treatment, not to mention the cure, almost impossible. In other words, the case may seem inoperable. But, if the patient's symptoms are not too fixed, and if he sincerely cooperates with the physician, then the symptoms may be removed without difficulty, and the distorted personality corrected. It is unfortunate that as a general rule a somatic disorder is categorically diagnosed without regard to the underlying personality, and the treatment instituted is purely physical. On the other hand, if symptoms arise that are obviously psychogenic and are apt to be troublesome, the physician may refer the patient to a specialist to get him off his hands, or he may dismiss him with an uncomplimentary remark, and so drive him away from qualified physicians and force him to become the support of some quack or cult. Every physician should remember that properly applied psychotherapy in the form of intelligent management will likely bring about a fair degree of adjustment in the majority of cases, and a true cure is not uncommon.

If the physician finds that the symptoms that he is called to deal with are mostly psychogenic, it is best that he not tell the patient that there is nothing wrong, or that it is all due to imagination. The patient may justly resent the one as false and the other as insulting. The fact is, that a functional symptom is just as real as an organic one, but most patients would rather have an organic ailment and be done with it than one which generally gets scant sympathy from the family, and indifferent attention from the physician. To insinuate that a patient "makes believe," or that his complaints are not real, is a serious psychotherapeutic error which will quickly destroy trust and confidence. He will at once attribute this to the ignorance or lack of understanding of the physician. It is just as grave an error to pat the patient on the back and tell him that he should forget his anxiety, phobia, or compulsion.

In instituting psychotherapy of any type, the first thing is to develop the patient's confidence, or to establish rapport, by taking him, or at least his complaint, very seriously. This is accomplished by obtaining, as meticulously as possible, a medical and social history, and making a very complete and thorough physical examination. No snap diagnosis should be made, and no conjectures expressed; if no physical ailment is found, the patient should be repeatedly assured on that score, and the normal anatomy and physi-

Presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine, Philadelphia, Pa., Oct. 1960.

ology explained to him. He should be told that a psychological, emotional, or mental condition is just as real as a physical one, and that fright, shock, anxiety, or personal conflict may cause nervousness and create definite symptoms. As an example, he may be told that the cold sweat that comes out on the forehead when a person is frightened is just as real as the sweat that comes after exercise; or that diarrhea caused by anxiety is just as real as the diarrhea caused by amoebic dysentery.

The physician should be careful to use language that will be understood, as most persons, and especially neurotics, have a special capacity to misinterpret what is said to them. They may even conclude that if the physician uses the word "mental," he has diagnosed them as "insane." Most people are afraid of going "insane," for that means commitment to the state hospital. On the other hand, although the practitioner may be understandingly sympathetic, he should never become facetious about the illness or descend to intimacy or levity. He should preserve a sense of dignity and convey the impression that he possesses sound medical knowledge and good insight into the problems of human behavior.

Since patients come to physicians hoping to receive tangible relief, it is sometimes well to place them on a tranquilizer or energizer without delay, but at the same time emphasizing that the medication is a temporary remedy, and that the basic cause should be sought. These medications should not be long continued, as neurotic patients are prone to develop a dependency on these drugs, akin to addiction. The cure may be worse than the disease. On the other hand, it has to be emphasized that there are certain personalities which require the continued or prolonged use of such medications.

The physician should convince the patient that he should be willing to bare all the intimacies of his life, and that nothing is unimportant. As the patient seizes on every word and action of the physician without realizing it, he or she develops a confidence that is akin to infatuation, which is called "transference." If the physician allows any advances, or takes any liberties, he creates an emotional situation that may lead to grave complications. The so-called "bedside manner" of some physicians, such as putting an arm around the waist, patting the hand, kissing the patient, or holding the hand during the conversation, makes the relationship between the patient and the doctor a personal matter and may block any constructive psychotherapy. Personal relationships are subject to censorship, and if there is a personal feeling between the patient and the physician, the patient will be reticent about discussing matters which may affect this relationship, but which nevertheless need to be brought to light if a readjustment is to be effected. This is the reason why psychiatrists seldom allow their patients to develop a social relationship with them. On the other hand, the practitioner should not give the impression that he is a judge, set above the patient, but rather a friend who feels that what the patient has done is neither good nor bad, moral nor immoral, beautiful nor ugly, decent nor indecent, but is the result of circumstances.

It is obvious that if some organic defect is found, an attempt should be made to correct it if possible. Unless the organic condition is paramount, it is unwise to emphasize it, since the patient may seize upon some minor or even major physical symptom and continue in his persistent refusal to face the more important problem of getting better.

An example of such a case was a young man who was very much upset because he had emphatically been told that he needed an appendectomy without delay, or the appendix would rupture. The physician had told him that he could see in the fluoroscope that the appendix was in a very bad condition. The young man came to me, wanting to know if he could "nervously" stand an operation. A thorough physical examination clearly showed that the appen-

dix was not involved, and that the abdominal discomfort was due to intestinal indigestion, associated with a frustrating marital situation. The patient talked out his emotional conflict, calmed down, was put on a corrective diet, and his abdominal pain cleared up without delay. Nevertheless, the seeds of uncertainty had been planted in his mind, and, in spite of psychotherapy, he persisted in shopping among the specialists until he found one who would remove the appendix. This was just the first of a series of operations that the young man underwent in his attempt to justify his neurotic behavior.

The object of psychotherapy, the practice of which begins the moment the patient crosses the threshold of the doctor's office, is to influence the problems of personality; thus the detailed physical examination, in addition to giving an understanding of the organic make-up under consideration, in itself becomes a psychotherapeutic measure.

The physical examination may lead the physician to the conclusion that some operative measure, medication, hypodermic injection, exercise, gymnastics, massage, diathermy, baths, rest cure, or what not, may be needed, but suggestion will play a very important part in these procedures. Perhaps the removal of a chronic appendix, or a fibroid, may help to remove the abdominal pain. Certainly, foci of infection should be properly treated, and complicating organic infections should be properly attended to, but one cannot insist too often on the fact that no personality problem was ever cured by a tranquilizer, energizer, or other mechanical means. Neither surgery, hypodermic or oral medication, nor any form of physiotherapy, will cure a deep-seated phobia, or dispel a paralyzing obsession. Operations, glandular therapy, and chemotherapy are many times curative and necessary, but great numbers of patients have been invalided and their neurotic symptoms made permanently inaccessible by the unwise application of these methods.

It is necessary to remember that many environmental factors are beyond the ability of either the patient or the physician to cope with, but these factors may be the cause of symptoms. The genesis of functional symptoms is not one of logic or intelligence. The subjective, emotionally tinged Unconscious is at the back of these symptoms; besides the need for adjusting the personality to the environment, it is well to bear in mind that emotionally created symptoms are in themselves a compromise attempt at adjustment. These symptoms may have been unconsciously grafted onto the personality pattern during childhood or later years through the method of suggestion.

It is possible that by painstaking reconditioning, symptoms may be changed, and the personality reeducated, but even with this method, suggestion plays a major role.

Suggestion is the oldest and most widely used method of psychotherapy, and history is replete with examples of miraculous cures based on faith in some inanimate or animate object. It cannot be too often repeated that it is impossible to eliminate suggestion from any form of treatment. Patients wish to be relieved of their suffering. Much of medicinal and surgical treatment owes its beneficial effect to the fact that the patients want to get well. The tradition of medical and surgical procedures is so firmly established that even the most enlightened patient feels that something is lacking when treatment is carried out without a "laying on of hands."

Suggestion is associated with the unconscious mind, and as a great part of the personality is unconscious, suggestion is at work in innumerable ways at almost every moment of the day. The person is constantly receiving suggestions, many of which lie hidden and apparently lost in the Unconscious and yet are hourly and daily shaping the personality. Perhaps these suggestions were first planted during childhood, for the human being is at no time more suggestible. So indelibly are the impressions of childhood stamped on the individual that they influence all

the future life for good or evil to an extent that is astounding. As a psychiatrist who has attempted to reeducate warped and twisted characters, I have been constantly impressed with the necessity for seeking the cause of the warp or twist in the half-forgotten experiences and memories of childhood.

Most people are slaves to their Unconscious, the product of ancestral times and early habit patterns, and they constantly accept many facts without wonder and without any sensation of witnessing the miraculous, simply because these facts have become familiar. That shame or pleasure will cause a flow of blood to the cheeks is so familiar a phenomenon that it causes no wonder. But if the memory of some unpleasant experience should cause an allergic-like skin reaction, the patient is in a quandary. Everybody is familiar with the fact that worry or fright has the power to upset the normal peristalsis of the stomach and intestines, but they may not realize that the secretions are altered, and indigestion, constipation, diarrhea, or colitis may be caused by the emotions.

If an article of diet once upsets the digestion, the patient, prompted by strong self-suggestion, is apt to feel sick or be sick every time the article is served or even mentioned. There may be an allergy, but more often an unconscious fear. If the patient is raised to believe that fresh air is the mainstay of life, he will suffer agonies in a closed room, often quite disproportionate to the atmosphere of the room. Then there are the persons prepared to go on a voyage and to be sick according to the usual custom, who become sick before the ship leaves the port; or the woman who has been told that nausea and vomiting are expected during pregnancy, so hyperemesis gravidarum develops. Perhaps a mother or grandmother suffered from dysmenorrhea, and the girl was told she could expect to be miserable when she menstruated, for all women had the "curse," and so painful menstruation continued as a tradition in the family. It might also be a family trait to be constipated, to have migraine, sick headaches, or bilious attacks.

But just as harmful suggestions may cause havoc in the human body, so helpful, pleasant suggestions may bring good feelings and help the personality to express itself in a healthier manner. Happiness, in the various forms in which it comes, is a most potent health-giving factor. When all medical remedies have failed to give relief, happiness has the power of making an immediate and convincing appeal to the Unconscious, and in the space of a few days, perhaps in a few minutes, the external signs of ill health are gone; the eyes are bright, the complexion clear, digestion normal, sleeplessness vanishes, and health is restored as if by a miracle. A person may have a severe headache and be very depressed, yet some good news comes, or a friend calls up for a date, and immediately all the symptoms disappear.

Hypnosis is short term psychotherapy and is being revived with undue enthusiasm. Nevertheless, it offers an approach to many psychogenic difficulties, since it allows the physician to influence the Unconscious directly. The dissociation brought about by this technic may serve as a gateway past resistance, and allows an indirect approach to symptoms which cannot be reached by conscious suggestion. One of the greatest obstacles in psychotherapy is to get the patient to consciously accept therapeutic suggestion. Under hypnosis, it is possible to implant therapeutic ideas upon the Unconscious, and to have them take effect when endless numbers of suggestions given in the waking state would be given no heed, or actively resisted. Under hypnosis, the patient accepts therapeutic suggestions and acts upon them without conscious awareness and without building up defense reactions. Also under hypnosis, former dissociated experiences and amnesic material

can be rendered available for reassociation and reorganization.

No discussion of short term therapy is complete without some mention of shock therapy. Although this technic is likely to be considered as somatic therapy, it has a large component of psychotherapy, since it creates an amnesia for unpleasant memories, or exorcises a sense of guilt. In the fraction of a second, the patient is completely disorganized and returns to the intrauterine state, and within a few minutes may reorganize into a more acceptable personality. Only three or four such treatments may be required to effect a "cure"; perhaps more may be needed. In any case, during the post-shock period, the patient is more amenable to therapeutic suggestion. Properly administered shock treatment undoubtedly expedites psychotherapy.

Finally, group psychotherapy may be short term or long term, and since it depends on interpersonal relations, it may best fit the patient for his readjustment to everyday life. This technic represents the family constellation and helps to break the transference neurosis.

SUMMARY

Short term psychotherapy is used by all physicians and surgeons. Since 80 per cent of all human ills have obvious emotional components, the patient's faith in his practitioner may greatly determine the ultimate outcome of the illness. Cold scientific reasoning may help the patient, but positive suggestion based on scientific fact is more effective. Conscious persuasion may engender resistance, but indirect suggestion may reach the Unconscious. Happiness transforms the personality from negativism to positivism, from emotional illness to health.

The tranquilizers and energizers should be used sparingly, since there is danger of dependency. They may be prescribed at first, but should be discontinued before long, whenever possible.

The technics of reason and suggestion may be reinforced and expedited by these medications, or by hypnosis, shock therapy, or group therapy.

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Mental disorders are neither more nor less than nervous disease in which mental symptoms predominate and their entire separation from other nervous diseases has been a sad hindrance to progress. . . . It is not right that the separation which is necessary for treatment should reach to their pathology and method of study.

H. Maudsley
Introduction to Aids to Psychiatry
Williams & Wilkins, Baltimore, 1960.

Experience with a New Cerebral Stimulant Hexacyclonate

EUGENE J. CHESROW, M.D., JOSEPH P. MUSCI, M.D., JACOB M. LEVINE, M.D., SHERMAN E. KAPLITZ, M.D., and RAOUL SABATINI, PH.D.

The Chemistry and Pharmacodynamics of Hexacyclonate

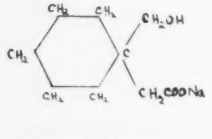
JACOB M. LEVINE, M.D.*

The widespread use of potent tranquilizing drugs has created a new problem—serious central nervous system depression. The older analeptics left much to be desired because of their side effects—tremulousness, hypertension, anorexia and insomnia. Thus efforts were directed toward discovery of new central nervous system stimulants.

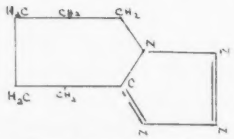
From this research has emerged a new antiapathetic agent, hexacyclonate, which is particularly effective in certain depressive states and in evoking a mild stimulation in geriatric patients.

My brief report scans the chemistry and pharmacodynamics of this compound.

Hexacyclonate is a white, crystalline compound freely soluble in water. It is also soluble in alcohol, but practically insoluble in ether. A 5% aqueous solution has a pH of 7.35. Chemically, hexacyclonate is sodium 3, 3-pentamethylene-4-hydroxybutyrate with the following structural formula. Pentylenetetrazol (Metrazol) is shown for comparison.



Hexacyclonate



Pentylenetetrazole

From studies in mice and rats it appears that hexacyclonate is about 10 times as toxic as metrazol.

Hexacyclonate is rapidly metabolized in the body as the cumulative studies (Table I) demonstrate.

TABLE I

Cumulative Studies

Dose: — 3 mg./kg., i.p.: ± ½ LD_{50}

No. Animals	Injection Interval (min.)	Dead after the 1st	2nd	3rd	4th	5th	6th	7th	8th injection
6	15	0	0	3	5	6	–	–	–
6	30	0	0	0	2	3	3	3	4
6	60	0	0	0	0	1	1	1	1

Please note that rats metabolize about 3 mg./kg./hr. and that the animals on the 60-minute interval received about four times the lethal dose. These results indicate that hexacyclonate is unlikely to have cumulative effects.

Administered to the intact animal, hexacyclonate causes tonic-clonic convulsions. Such convulsions also will occur in decerebrated, but not decapitated cats. The convulsive effect can be blocked by ligation of the cranial arteries previous to the administration of the drug indicating that hexacyclonate acts mainly on the brain, including the medullary centers.

Like metrazol, hexacyclonate is an effective stimulant when the respiratory center is depressed by barbiturates. These two stimulants were compared in dogs anæsthetized with sodium phenobarbital, 150 mg./kg. I.V. and with resultant marked, sustained respiratory depression. Respiratory minute-volume was measured by a recording gas-meter connected to the animal's trachea. At least a 30-minute control period of nearly constant gaseous exchange was determined prior to injection of the analeptic in saline given intravenously. Table II shows the effects on respiration.

*Presented at the Symposium on Anxiety and Depression, Academy of Psychosomatic Medicine, New York, N. Y., June 25, 1961.

From Oak Forest Hospital, Oak Forest, Ill.

TABLE II

Effect on Respiration

Compound	Dose (mg./kg.)	No. of Trials	Increase of Respiratory Minute Volume (%)
Penetylene-	5.0	1	23.0
tetrazole	10.0	13	19.5
	0.5	2	19.0
	1.0	3	20.3
Hexacyclonate	2.0	1	38.0
	5.0	2	30.5
	8.0	2	32.5
	10.0	2	58.5

The respiratory stimulating action of hexacyclonate was also found to apply against respiratory depression induced by chloralose, urethane or morphine.

The action on blood pressure was negligible. If blood pressure is depressed by deep anæsthesia, hexacyclonate causes a rise in blood pressure and a fall of elevated venous pressure. This action probably results from stimulation of the vasomotor and respiratory centers. Hexacyclonate may directly stimulate the myocardium. On the isolated frog heart, perfusion of a 1:500 concentration of hexacyclonate induced increased rate and amplitude of contraction. However, this represents an amount of the drug that far exceeds the calculated convulsive or lethal doses for the whole animal.

In animals protected by curarization and artificial respiration, hexacyclonate in doses as high as 15 mg./kg. did not alter the electrocardiogram.

SUMMARY

1. Hexacyclonate is approximately 10 times as potent as pentylenetetrazole.

2. Hexacyclonate is rapidly metabolized by the body and toxicity studies indicate a considerable safety of administration.

3. Marked respiratory stimulation is produced by hexacyclonate when respiration is depressed by various drugs.

4. Hexacyclonate is practically devoid of circulatory effects.

Clinical Study With Hexacyclonate

SHERMAN E. KAPLITZ, M.D.

Thirty-six patients with definite evidence of apathy and mental changes associated with depressive states, anxieties, and senile arteriosclerotic deterioration were selected. Of this group, 14 patients were women and 22 were men. Ages ranged from 29 to 88 years with an average of 64.7 years. In 17 patients, apathy was part of the general mental changes associated with cerebral arteriosclerosis. In the remaining 19 patients, apathy was associated with anxiety and depression.

All previous medications were discontinued before the start of the investigation. Complete physical, neuropsychiatric, and psychologic examinations were performed on each patient before initiating treatment, and were repeated during the course and at the completion of the investigation. Blood pressure readings were recorded twice weekly. Laboratory tests, including complete blood counts, sedimentation rate, urinalysis, and nonprotein nitrogen levels were done before, during and after completion of the study. Liver profile tests were performed on a randomized group of eight patients.

Specialized psychologic testing was performed by our clinical psychologist. A test for mental capacity, known as the Raven-Progressive Matrices, Form B, was completed by each patient; all were found to be of average normal mentality. The Personal Audit Form LL, inaugurated by C. R. Adams and W. M. Leeply, was used to obtain an objective index of personality and an indication of present and potential maladjustment. The personality traits and their opposite extremes included in this test were: seriousness (ser)—impulsiveness (imp), firmness (fir)—indecision (ind), tranquility (tra) — irritability (irr), frankness (fra)—evasion (eva), stability (sta)—instability (ins), tolerance (tol)—intolerance (int), steadiness (ste)—emotionality (emo), persistence

(per) — fluctuation (flu), contentment (con)—worry (wor).

Another test that was used was the S.R.A.-Form AH, as devised by R.N. McCurry and J. F. King. This efficiency test measures the patient's general intelligence, sometimes called the aptitude to learn, and his ability to solve problems, to foresee and plan, to use initiative, and to think quickly and creatively.

The subjects were divided into two groups. One group was given hexacyclonate for thirty days, the other a placebo. At the end of this period, both groups were retested and were then transferred to the opposite medication (placebo or hexacyclonate) for an additional thirty days. All information regarding the type of drug the patients were receiving was purposely withheld from the neuropsychiatrist and psychologist. A 50 mg. tablet of hexacyclonate was administered three times daily, as was a placebo identical in appearance.

RESULTS

In considering the results of our study, particular stress was placed on the patient's general apathy, mood, interest, physical and mental activity, sense of well-being, and behavior. Improvement in these criteria was determined weekly, summarized at the end of the evaluation, and reported in Table I as excellent, moderate, fair and negative. Excellent and moderate results were generally clear-cut and, therefore, can be grouped together;

TABLE I

Hexacyclonate (W-1597) in 36 Chronically Ill Patients at Oak Forest Hospital

Results obtained in entire group:

Excellent:	— 23	patients	— 63.9%
Moderate:	— 4	patients	— 11.1%
Fair:	— 7	patients	— 19.5%
Negative:	— 2	patients	— 5.5%

Results obtained in 17 cases of Cerebral Arteriosclerosis:

Excellent:	— 9	patients	— 52.9%
Moderate:	— 2	patients	— 11.8%
Fair:	— 5	patients	— 29.4%
Negative:	— 1	patient	— 5.9%

Results obtained in 19 cases of Anxiety and/or: depression:

Excellent:	— 14	patients	— 73.7%
Moderate:	— 2	patients	— 10.5%
Fair:	— 2	patients	— 10.5%
Negative:	— 1	patient	— 5.3%

Personality Score Profile
BEFORE AND AFTER DRUG
(Actual Drug and Placebo)
Number of Patients: 18
Norms Used: General Adult (MF)

	Raw Score			Percentile		
Part	Before	After	Control	Before	After	Control
Part I	77	90	80	72	46	61
Part II	59	33	55	7	58	20
Part III	75	104	89	69	22	60
Part IV	73	61	77	7	39	5
Part V	70	49	67	11	35	22
Part VI	71	107	87	81	26	75
Part VII	41	38	44	19	22	12
Part VIII	66	30	43	7	55	30
Part IX	95	80	97	10	17	11

PERSONALITY SURVEY

( ) Extremely low
(*) Low
( ) Low normal
(*) Normal
( ) High normal
( ) High
( ) Extremely high

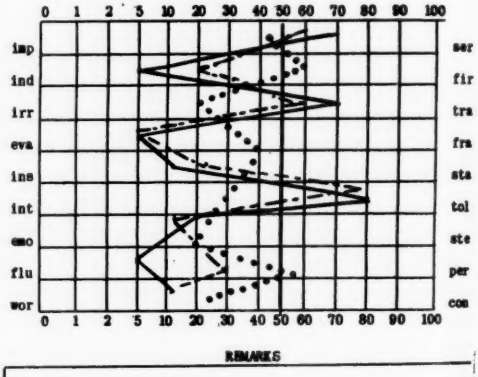


Figure 1.

27 (75 per cent) patients exhibited improvement of this degree. Fair improvement was often questionable and, therefore, should be combined with the results of the group that did not show improvement; 9 (25 per cent) patients were in these categories.

As might be expected, the younger patients, chiefly those with anxiety and depression, showed a better response, with 85 per cent excellent or moderate improvement, than the older ones with cerebral arteriosclerosis, who showed 65 per cent excellent or moderate improvement.

Average results of the personality psychologic tests completed before the beginning of the study and after receiving the drug and placebo are shown in Figure 1. As will be noted, there is a tendency for the personality traits to be closer to the midline (50 percentile) following administration of the drug. This indicates an improvement while receiving hexacyclonate.

In this test, the more serious and cautious patient tended to become more talkative and impulsive, and the indecisive patient with poor concentration and evaluation, more cooperative, poised and confident. Concentration and evaluation were improved and recreational activities were wholesome and worthwhile. The patients who were evasive, who were apt to "pass the buck," became more conscientious and willing to accept responsibilities. Stability and instability remained about the same, although there seemed to be a general trend toward stability. There was little alteration in emotionality, although these patients did become more persistent in their attitudes and interests with less fluctuation in their ideas. There was little change in contentment or worry.

As indicated by increases in the post-treatment mean scores of the S.R.A.-Form AH test, hexacyclonate brought a definite improvement in the ability to solve problems, to foresee and plan, to use initiative, and to think more quickly and creatively. In general, these results indicated better over-all efficiency.

No significant changes were noted in regard to the weight, blood pressure, or pulse. Thirty patients maintained their original weight with normal variations. Although the drug did not appear to possess an anorexigenic effect, four patients lost from 5 to 7 pounds. Two patients gained weight: one, 5½ pounds, the other 8½ pounds. Blood-pressure readings did not vary in 26 patients. Eight patients had a slight decrease; two showed an increase, although the variations in the latter were noted before they were placed on the drug. No respiratory changes were noted.

According to the laboratory studies which were done at one- to two-week intervals, two patients exhibited a mild leukopenia with no apparent clinical effects. Six patients showed a slight decrease in percentage of hemoglobin, and 14 patients had a hemoglobin increase of 5 to 25 per cent. Among these, 10 patients had a proportional increase in the hematocrit; urinalysis and nonprotein nitrogen remained practically unchanged. Eight patients chosen at random were given liver profile tests including nonprotein nitrogen, total protein, albumin, globulin, gamma globulin, alkaline phosphatase, icterus index, cephalin flocculation, and thymol turbidity, with no significant changes. Three patients had a slight increase—up to 9—in the icterus index, without clinical evidence of jaundice. The first increase was noted at the end of treatment in one patient and one week after the end of the treatment in the other two. The icterus index returned to normal within three to six weeks after the medication had been discontinued in all three patients.

Sleep Paralysis

JEROME M. SCHNECK, M.D.*

Textbooks mention sleep paralysis briefly, if at all, and have it under the heading of narcolepsy.[1] A minority of patients with narcolepsy have episodes of sleep paralysis. They may also have attacks of cataplexy. Yet it has become increasingly evident that sleep paralysis may exist without narcolepsy or cataplexy, a point of interest to all physicians regardless of specialty, and the problem is generally unrecognized. Four instances of sleep paralysis without narcolepsy or cataplexy have come to my attention recently. One was clearly described in a letter by a man in his twenties. Another was discussed with me in a social setting by a woman in her forties. Two additional cases were seen as patients in treatment, at which time they could be studied carefully. This report will center attention only on them. These instances of sleep paralysis supplement six others that I presented earlier with special reference to psychodynamics, peculiarities, and unusual severity in one patient especially.[2]

CASE REPORTS

Case 1. A 28-year-old patient lay on his bed to rest one evening. His wife was in the room, talking on the telephone to her sister. The conversation pertained to the pathological need of their mother to control and manipulate them. The patient fell into a half waking, half sleeping state. He found himself completely paralyzed. While he continued to hear the telephone conversation he experienced auditory and visual hallucinations that were "terrifying." Although unable to move, he had the feeling that his right arm and leg were rising, apparently to ward off some threatening hallucinated assault which he was later unable to recall. His wife, facing him, did not observe any actual movement. He felt a heavy, oppressive weight on his chest, resulting in a sensation of constriction, difficulty in breathing, and the fear of imminent death. As his anxiety mounted, he wanted to shout and had the impression he was moaning, but his wife heard nothing. Subjectively the paralysis seemed to last more than one half hour, but according to time span covered by television programs turned on at the time, this impression was exaggerated. He could not have been on the bed more than twenty minutes, and the paralysis lasted only a fraction of that time. Very suddenly, he was able to extricate himself from it. In his anxiety he feared a heart attack, and at the conclusion of the episode he wondered about possible physical damage as a result. He remembered having had some episodes of this type in the past, but the details were now somewhat vague. There was no history of narcolepsy or cataplexy.

Case 2. A 31-year-old patient described the symptoms of sleep paralysis when giving details of his past history. Episodes were occasional but had been frequent when they first started twelve years before. They had appeared on an average of every two weeks. The patient would find himself feeling half awake, half asleep, after having first fallen asleep at night. Aware of his surroundings, he would have a variety of hallucinations. He recalled seeing insects, snakes, and "small animals" climbing over him. He would feel their weight and movement. He hallucinated men and women threatening him, and once saw a man coming at him with a knife. Unable to shout or scream, he would have a feeling of suffocation, as if someone were sitting on his chest. It would seem to him as if a long time were passing when suddenly, by straining hard, he could break through the paralysis. Narcolepsy and cataplexy were not present.

COMMENT

The first patient entered treatment for compulsive eating. As other problems were clarified during extensive personality investigation, it was apparent that he possessed strong inclinations toward passivity in contrast to his strivings for power and control with aggressive activity. I have encountered this passivity-aggressivity problem in other patients with sleep paralysis and believe it may be a common denominator. The nature of the paralysis was typical for this condition. Its occurrence during his wife's telephone conversation is of interest because the content fits in with basic psychological

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problems of the patient, centering on interpersonal conflict and control. Most patients describe a feeling of being half awake, half asleep. Hallucinations are mentioned frequently. They are generally unpleasant. An oppressive weight on the chest, at times as if someone is sitting on it, is often described. The feeling of suffocation and fear of imminent death, the severe anxiety, unsuccessful attempts to shout, and the time distortion are typical for sleep paralysis. A patient's moaning is often heard by others although apparently it was not in this case. This leads at times to being touched by others, thus terminating the paralysis, although patients may effect on their own a slight movement of head or limb that will be sufficient to end the episode.

In contrast to the few attacks of the first patient, the second had many. They decreased in frequency in recent years. Some people may have relatively isolated occurrences; others may experience weekly attacks for many years. The more frequent and prolonged the sleep paralysis problem, the greater the advisability of psychotherapy. Rare episodes need not require treatment and in such cases the problem is not mentioned by patients as a presenting complaint for which help is sought directly. It may be described incidentally, and as a result tends to be bypassed, with its actual significance remaining unrecognized. The presenting problem for the second patient was impotence; the passivity-aggressivity problem was also encountered with him. His attacks had been pronounced in military service. In a few patients marked stress of latent homosexuality seems to be present and I believe this was true for him. He was uncomfortable with people, especially women, had never had intercourse, and was troubled with pathological blushing.

SUMMARY

Sleep paralysis occurs with varying frequency on falling asleep or awaking, usually the latter. The patient feels half awake, half asleep, is competely paralyzed, and may have hallucinations that are often frightening. He is aware of his surroundings, is troubled by marked anxiety, may have a fear of imminent death, and feels pressure frequently on his chest with concern about possible suffocation. Time usually seems to pass slowly. He is unable to speak or shout but may manage to moan. When attracting attention in this way, a slight touch may end the episode. At times it may terminate suddenly when the patient finally moves his head or a limb. Relief is rapid although some anxiety tends to persist for awhile. The episodes are apparently far more common than physicians recognize. This may be accounted for in part by infrequent occurrences being mentioned as a secondary problem rather than a primary complaint requiring treatment. Sometimes prolonged, severe attacks are reported, and for these psychotherapy is suggested. A minority of patients with narcolepsy and cataplexy have sleep paralysis also, but I should like to stress that episodes of sleep paralysis occur in the absence of either narcolepsy or cataplexy. Such cases occur far more often than is evident from reports in the literature.

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Clinical Experience with Chlordiazepoxide in Acute Alcoholism

ANGELO D'AGOSTINO, M.D., and JOHN D. SCHULTZ, M.D.

Acutely agitated states comprise approximately 75 per cent of the total admission diagnoses to the Psychiatric Department of the District of Columbia General Hospital, which is a representative metropolitan hospital. Thus, these conditions present a matter of no small magnitude demanding constant search for rapid and safe means of treatment. Previously used agents, notably the phenothiazines, appeared effective but the concomitant danger of hypotensive reactions was always present.

In our screening of newer quieting agents, it soon became apparent that chlordiazepoxide (Librium) was effective in toxic psychotic agitated states,[1] including those associated with acute alcoholism. In animals, the activity of this recently synthesized agent, which is chemically unrelated to any other tranquilizer, was pharmacologically unique.[2] Its extensive use clinically showed it to be sufficiently safe to allow intravenous and intramuscular administration to human subjects.

This report presents the results obtained with chlordiazepoxide administered to 300 patients with agitated alcoholic states.

The study was not designed in double-blind fashion. The syndrome of the acute alcoholic directly after a bout of prolonged excessive consumption of alcohol is all too familiar, and the immediate clinical course of withdrawal well known. Previous experience with other medications administered to large numbers of patients could serve as an accurate gauge by which to measure the effect of a new and different agent. This experience constituted a type of control which could be expected to furnish reasonably valid results. We therefore projected the plan of administering Librium as the sole quieting agent where previously the phenothiazines were employed. Other variables, such as adjunctive medication for dehydration, anorexia and salt loss remained unaltered.

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METHOD

While the use of this drug was originally extended to all agitated states including the schizophrenic reactions, the very early results revealed rather unpredictable activity of the drug in the latter cases.[3] However, the excellent effects seen in the acutely disturbed alcoholic led us to limit its use solely to those admitted with syndromes induced by alcoholic ingestion. We have classified these states under the following headings: 1) acute alcoholic intoxication, 2) alcoholic hallucinosis, 3) tremors, 4) hallucinations and tremors, and 5) convulsive episodes associated with alcoholic ingestion, *i.e.*, "alcolepsy."

Patients given the drug were not screened except insofar as they were admitted to the alcoholic unit. On the days when the author was available to administer the new agent, and as soon as the patient's medical status and diagnosis were confirmed, 100 mg. of the drug, diluted in 10 cc. of water, was administered intravenously; 50 mg. was also given orally every six hours for four doses, and this was followed by a course of 25 mg. every six hours for three days.

RESULTS

Acute Intoxication

The presence of a significant blood alcohol level does not appear to be a contra-

indication to the use of this agent. Of the 44 cases giving clinical evidence of acute alcoholic intoxication, 41 showed significant amelioration of aggressive behavior and agitation, with noticeable calming action and light sleep ensuing. No hypotensive effect or potentiation was noted in any of these cases. The initial intravenous administration of 100 mg. was augmented by 50 mg. orally immediately, and every six hours subsequently for twenty-four hours, whereupon the oral dose was reduced to 25 mg., q.i.d. for three days. It was found that despite the frequent finding of acute gastric upset, most patients were able to tolerate fluids and food by mouth; in fact they often voiced hunger and thirst within a few minutes after treatment was begun.

Acute Hallucinosis (Withdrawal)

In cases uncomplicated by concomitant presence of blood alcohol levels, results were more gratifying. With the intravenous administrations of 100 mg., in 18 subjects there was complete clearing within five minutes. Tactile, auditory or visual hallucinations all responded equally well. The fearful, terrorizing aspect which commonplace environmental objects often assume in this syndrome likewise showed rapid resolution. One patient explained that a still-life painting in the examiner's office appeared so horrible to him, he had to look away from it, but immediately after administration of the drug, the painting became innocuous.

Tremors

The finding of gross, generalized tremors as the sole manifestation of withdrawal is relatively uncommon, *i.e.*, approximately 5%. In 11 of 16 cases, 100 mg. (intravenously) appeared to reduce the tremors significantly but the other five patients required an additional 100 mg. to obtain a satisfactory response. These patients were also given 50 mg. orally, simultaneously with the initial intravenous dose, and every six hours for 24 hours, followed by 25 mg. q.i.d. for three days.

In one patient seen in a non-alcoholic patient unit, results with Librium were dramatic. At the time of entry to the hospital this patient had denied using alcohol but after two days was found to have marked generalized tremors necessitating restraints to prevent him from falling out of bed. He was sweating profusely, literally bouncing uncontrollably on the bed, and was extremely apprehensive, though not hallucinating. Immediate objective and subjective calming was produced by administering 100 mg. Librium intravenously, as well as orally; no recurrence of tremors was noted thereafter.

Hallucination and Tremors

By far the largest group of patients seen (194) exhibited varying degrees of acute alcoholism with both tremulousness and hallucinatory phenomena evident. As in the previously described categories, 100 mg. was given intravenously as well as 50 mg. orally q. six hours for 24 hours, followed by 25 mg. q.i.d. for three days. The majority of these patients (171) responded with observable and subjective quieting effects within five minutes after injection.[4] In those cases where no significant relief was noted within 30 minutes, another 100 mg. was given intravenously. This repeated dose was effective in relieving symptoms in all except one case where another 85 mg. was given cautiously. This patient, a 45-year-old white woman with a long-standing history of chronic alcoholism was admitted after three weeks' ingestion of over two fifths of whiskey daily. Marked tremors, agitation, as well as striking visual and auditory hallucinations were present. After intravenous administration of a total of 285 mg. of Librium in the course of one hour* the patient appeared somewhat

quieter, and the hallucinations had diminished appreciably. There was no change in blood pressure and she remained awake but was able to sleep when left undisturbed. Due to an error in communication, the ward physician who saw the patient the next morning was little impressed with the patient's pathology; in fact, she appeared so well, that she was discharged.

Convulsions

Twenty-eight patients were seen in whom convulsions appeared as a manifestation of alcoholic ingestion. The use of chlordiazepoxide has been most gratifying in the treatment of this syndrome referred to locally as "alcolepsy." Convulsive seizures recurred in four cases, but these all responded to single repeated intravenous administration of 100 mg. of Librium. The drug regimen in this group of patients was identical to that described in the sections above. One patient, who has been hospitalized seven times in four years for acute alcoholism and d.t.'s, was known to have had generalized convulsions on four of the previous admissions. The convulsions were known to have appeared during the withdrawal stage after heavy drinking bouts. At the time of the current admission the patient had not been drinking for two days following a two-week alcoholic spree, and was experiencing tremors and hallucinations. He also stated that he felt a convulsive seizure was imminent at the time of admission. Because of his known predisposition to seizures, 100 mg. was given intravenously and 100 mg. orally with only temporary relief of the tremors and hallucinatory phenomena. After one hour, another 100 mg. was administered intravenously and again afforded only temporary relief, so that after a second hour this dose was again repeated in an attempt to abort incipient seizure. In the course of three hours therefore the patient was given 300 mg. intravenously and 100 mg. orally. He was maintained on 50 mg. every six hours for the following five days with no convulsive episodes and was discharged at the end of seven days. In three cases not in this series, the patients were known to have received phenothiazines to control the d.t.'s and had experienced generalized convulsions. Immediate administration of 100 mg. Librium intravenously seemed to prevent further seizures and showed no potentiating effect, except that the patients slept very soundly for some 24 hours thereafter.

DISCUSSION

The great strides made in the treatment of the d.t.'s and its variants by the use of phenothiazine drugs is incontestable. However, two serious drawbacks to the use of these agents are: 1) the significant number of hypotensive reactions at dosages required to control symptoms; 2) the frequency of extrapyramidal and heavy sedative effects. In our experience with 300 patients, hypotension was seen in only one in whom no history could be elicited; however, after two days of investigation we discovered that the patient had received 150 mg. of a barbiturate intramuscularly, shortly before admission. No extrapyramidal effects were seen in any of the 300 patients.

Ataxia was observed in 18% of the patients despite a reduction of oral medication to 25 mg. on the second day. This effect was noticeable only when the patient ambulated, and disappeared when the drug was discontinued, as other investigators have also reported.[5-7] The cause of ataxia is still under investigation; whether it is central in origin or primarily a skeletal muscle relaxing effect, remains to be

*Dr. Edwin McH. N. Dunlop has demonstrated that chlordiazepoxide administered intravenously had a specific calming quality accompanied by a sense of well-being without agitation or overstimulation. Improvement was perceptible in a matter of hours. No hypotension was observed following intravenous administration of 200 mg. of chlordiazepoxide. Presented in the form of a Scientific Exhibit at the AMA annual meeting in Miami Beach, Florida, June 13-17, 1960.

determined. The rage reaction described by other investigators was not encountered in our series.[8]

Another favorable effect of this agent was the reduced need for personalized nursing attention. Since one of the frequent effects was appetite and thirst stimulation, the patient needed no elaborate parenteral replacement. In the course of four months the number of intravenous replacement units used on the alcoholic ward dropped from approximately 75 to 15 monthly. Since the patients are not sedated by the drug, they are able to ambulate freely, feed themselves and cooperate in ward activities. The increased mobilization undoubtedly accounts for the reduced incidence of pneumonia, so often seen as a complicating factor in d.t.'s. The need for the use of restraints for extremely agitated or heavily sedated patients has also been markedly reduced. Patients are discharged from two to four days earlier than with previously used agents. While this series is limited as to number of patients and time of observation, there has been no evidence to date of hepatic damage, lactation or agranulocytosis. Addiction to the intravenous route of administration has not been encountered.

At the time of this writing, a diluent for intramuscular use is being investigated; this vehicle promises to allow intramuscular administration of the drug, with perhaps anticipated delay in onset of action, compared with intravenous administration. However, among the advantages of the intramuscular route, is to make its use feasible outside the hospital setting.

SUMMARY

A new quieting agent, chlordiazepoxide, was used for treatment of 300 patients admitted to an alcoholic unit of a large metropolitan hospital. Except for a mild reversible ataxia, no side effects such as hypotension, extrapyramidal signs, heavy sedation, agranulocytosis or addiction were encountered in this limited series. The points in favor of its use are: 1) rapid resolution of hallucinatory phenomena and tremors, 2) freedom from hypotensive reaction, 3) reduction in need for personalized nursing care due to increased mobility of the patient, ability to feed himself, and fewer medical complications, 4) less need for parenteral electrolyte replacement, and 5) large margin of safety in dose tolerance.

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The Psychological Processes of Normal Convalescence*

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In recent years there have been several descriptions of observations pertaining to the psychological aspects of convalescence.[1-4] Shands, in particular, was able to organize the individual observations into a unified pattern of the process of recovery, which describes the process of convalescence.[5] The present research endeavored further to study normal convalescence, and some of its common complications. Each patient in the present study was convalescing from general medically or surgically treated illnesses, including traumatic fractures. Forty-four patients were studied in detail from a psychiatric point of view. In particular, the project was intended to shed light on the dynamics of the typical reactions of convalescence and the influence of the premorbid life situation upon the outcome of convalescence.

I. *Assimilation of the Awareness Of Having the Illness:*

The first reactions and emotional state of the patient on suffering an injury, or becoming aware of the onset of an illness, are indistinguishable from the syndrome of traumatic neurosis. When the onset is sudden (viz. "unexpected"), or intensity of fear or pain great, there may be a temporary suspension of ego function (loss of consciousness; syncope; chaos) or a variable period of depersonalization.[5] These operations must be viewed as an attempt to withdraw from, alienate the traumatic reality. Cathexes are withdrawn from the ego as well as from the environment. The depersonalized patient sometimes feels as though he were the observer viewing himself in the traumatic situation. His feeling is: "This is not I."[5] Depersonalization is a specific defense against unpleasant affect, most commonly anxiety. The state of depersonalization, however, is precarious in that in itself it is a source of concern. It implies, among others, a partial suspension of ego controls, making possible the breakthrough of unconscious drives. Under these conditions psychotic episodes may occur.[3]

If such hazards are avoided, next follows a "working over" of the traumatic awareness through repetition in nightmares, dreams and conscious re-working, characteristic of the traumatic neurosis, which has been observed repeatedly in convalescent patients.[3,4,6] Characteristically, the conscious working-over of the trauma is most manifest in the patient's propensity to retell the circumstances of his illness.

II. *Regression in Convalescence:*

When the patient masters the traumatic awareness of his illness he gradually reestablishes his contact with reality, but usually on the basis of the following defensive operations:

1. *Libidinal Regression:* This involves the general childishness of patients, their preoccupation or rebelliousness to matters of cleanliness, toilet and feeding. The regression consists of the giving up of adults' interest and pleasures in favor of these that dominated our childhood. The most conspicuous single symptom in this area is concern over one's bowel movements.[7,8]

2. *Narcissistic Regression:* Here we observe a withdrawal of all interest in the environment, in one's loved ones, in favor of one's self and especially the diseased organ. The ill person "cannot be bothered" by anything except his welfare.

3. *The Denial of Illness:* This will be discussed in greater detail later. It is de-

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fined as a distortion of one's reality testing resulting in ignoring, minimizing and failing to acknowledge the true extent of one's illness and its consequences. The libidinal and narcissistic regressions are psychodynamically related. Their etiology is most complex, resulting in a tendency for involvement in the complications of convalescence. Such psychic phenomena described as *overdetermined* tend to have a number of reasons at different levels of function. The following are some of those involved in regression:

(a) *Enforced Helplessness:* The physiological disturbance and discomfort causes helplessness and necessitates dependence. The enforced nature of this helplessness facilitates regression "in the service of the ego,"[9] in that it makes possible the indulgence of passive and pregenital strivings under circumstances which the patients can accept, because they are beyond their control. The patients' regression makes possible their nursing care, and favors an escape from the integrating functions of the ego which would otherwise force an immediate facing of the reality of the loss.

Case 12: H.R., 65-year-old patient admitted with a cerebral thrombosis with left hemiplegia. Shortly before her illness her husband acquired a traveling job which caused him to be home with his wife only every other week-end. The patient's children were all married and she felt "left alone." Her son was moving out of the city. The hospital personnel noted a marked emotional lability, the patient tending to "laugh hysterically" or cry when she "stammered over her tongue," or with no apparent reason during the conversation. One observation of the staff reads, "I was not impressed with the patient's desire to get well."

Physiotherapy report read: "H. does not have the patience to concentrate on coordination," and "Patient fears falling which leads to increased tension through the body which makes balance very difficult." Somehow arrangements were made for the patient to stay with her daughter "for awhile" resulting in an improvement in the patient's spirits.

(b) *Narcissistic Injury:* The onset of a malady or the occurrence of an injurious event destroys, at least temporarily, one's narcissistic omnipotence. One is forced to give up the feeling "it couldn't happen to me" and relinquish one's deep-seated conviction of omnipotence. When he does so, he returns to an infantile position; that is, he ascribes the omnipotence to the parental substitute: the doctor, the nurse or the hospital. He expects, often unrealistically, that his doctor should restore him to the fulfillment of his self image which he had before his illness. Patients will, of course, vary in the degree of unreality of this image. The following case illustrates a serious deviation:

Case 41: J.H., a 32-year-old man was seen in a tuberculosis hospital because of an acute attack of anxiety. The patient had just been hospitalized within the previous week. His illness was discovered shortly after the birth of his sixth child. His brother was hospitalized for a psychosis with the predominant delusions of being crucified for the sins of the world. The patient allegedly acquired his infection from a girl with whom he worked, whom he drove to work for one year, and whom he described as an extremely good looking girl, and who had recently married. The patient seemed to have formed a considerable attachment to her. Among the thoughts the patient had during his panic was one he faced with some disbelief: that he was Jesus, or perhaps His representative. He talked about accepting his illness with gratitude as his "cross to bear," and being grateful to the person who "gave him" the illness. During this point of the interview he broke down into tears and had the feeling that the "room was closing in on him." The patient thus gave us indications of the fact that he experienced his illness as a punishment. He felt guilt, as his later productions showed, because of his attraction to the girl, who, as it turned out, was the source of his infection. He could neither express, nor handle his resentment over being ill.

He also became frightened that being ill, he was "losing his virility." He expressed a wish that his wife should spend a night with him in the sanitarium, but then became aware of a fear that he might have the impulse to kill her if this wish were granted. Noticeable also was the expression of his identification with his psychotic brother.

This transference relation also accounts for two phenomena observable in many patients: the projection of illness, and the pre-separation relapses. Projection is used

in convalescence as a way of denial of illness, which we shall discuss separately. The omnipotence ascribed to the physician allows the patient to project the illness upon the physician. ("It's his fault he didn't cure me.") Most of our patients showed a marked depression or relapse of symptoms before discharge. This is a form of separation anxiety. Once having given up his self-reliance the patient fears facing reality on his own.

(c) *Pathogenic Hypochondriasis:* Ferenczi pointed out that "libido that is withdrawn from the other world is directed not toward the whole ego, but chiefly to the diseased or injured organ, and evokes symptoms at the injured or diseased area that must be referred to as a local increase in libido . . ."[11] These same forces are operative in the libidinal regression one observes in the acute stages of illnesses in patients who are able to work through the loss. The "pathogenic" hypochondriasis works in yet another way to favor regression. The diseased organ becomes *identified with one's self as the infant cared-for by the mother,* while the remaining part of the ego represents the infantile image of the mother.[12] This reaction was illustrated by a child who carried his injured hand wrapped in a towel and spoke of it as "it" and "he." He continued this behavior for several days after the injury was completely healed.

Many patients expressed the understanding that his diseased organ has to be "babied" or "nursed" along. The very name, "nurse," bespeaks these regressive yearnings.

(d) *Revival of Unconscious Guilt and Castration Anxiety:* Of all the factors leading to regression, this one is by far the most important. Every patient has to deal with the question, "Why did this happen to *me?*" The illness is viewed as punishment for one's guilt, a "cross to bear." Such conscious expressions of guilt are frequently seen in the clinic, and have been reported previously.[1,2,13]

At the onset of illness, the most significant effect of the "punishment" meaning of the disease is that it "proves" and therefore brings to fore any unconscious guilt the patient may have been harboring. Because the revived guilt has its sources in repressed infantile conflicts—the patient has to deal with the unconscious fear that once the punishment is started—it may go on to measures he dreads the most: death, mutilation, castration. The patient therefore has to deal with anxiety of serious proportions. The frequent occurrence of anxiety and nightmares in a patient who, sometimes, had none since childhood shows the infantile basis of the revived conflicts.[1] Although the sources of the resurgent guilt are many, and vary with the individual, at present we shall emphasize the most constant ones: guilt originating in the revived childhood neurosis and guilt because of unconscious (death) wishes toward one's love-object. In the latter, the conflicts could often be shown to be re-experienced in a transference relation with a person in the patient's current life situation. The following case illustrates the revival of anxiety over sexual function in a woman who, though she had evidence of some conflict in this area, could be considered a "normal" person:

E.H., a 26-year-old woman, married and the mother of a boy aged four, was referred to the psychiatric clinic of Detroit Receiving Hospital by the Surgery Department because she was refusing to grant a permit for an operation for a hernia. The patient was very anxious and felt that she "either won't come back from the operating room or will crack up." The patient had very strict parents. Particularly her mother was punitive and used to threaten the patient that she would disown her if she indulged in sexual activity premaritally. The patient complied with her mother's injunction and planned to be a career woman. When she met her present husband, however, he persuaded her to marry him. He had been going with another woman prior to meeting the patient; before the wedding the patient received a letter from that woman saying that she wasn't giving up but would try to 'get her man." The patient was ready to give her fiance his freedom to marry the other woman,

for she "didn't want to marry anyhow." Shortly after her wedding, the patient became pregnant. She resented the early pregnancy and feared she might die during the delivery. Two years later the patient had appendicitis. Her appendix ruptured before the operation and as a result the patient had subsequently two cul-de-sac taps and laparotomy to drain pus from a localized peritonitis.

When the patient became sick, she developed the feeling that her husband must have caused her illness through having intercourse with her. In the hospital she started having nightmares of a woman "dressed in white" coming to her and frightening her. She stated that the woman was "the former sweetheart of her husband." After return from the hospital between operations, the patient refused to have sexual intercourse with her husband. At once, she was sending him "somewhere else" to get his sexual satisfaction and becoming very jealous of him. She did not want to have intercourse for "fear of pregnancy" which, she felt, would cause her to die at the delivery. Her anxiety mounted until the doctor, during a follow-up examination for the abdominal condition, found an inguinal hernia, and recommended an operation. At this point the patient became so anxious that she sought psychiatric treatment.

It should be re-emphasized that anxiety, regressive behavior, disturbances of sexual potency, and even neurosis may be precipitated by illness in a mate, relative or other love objects no less than the patient himself.

III. *Denial of Illness:*

Denial of the extent of illness is a defensive operation, and of great importance in convalescence, for it leads the patient to exert all efforts to regain as much as possible of his health. In patients who "give up hope" in the early stages of the illness, an act often due to the same implications of illness that otherwise lead to regression (narcissistic injury, revival of guilt which caused the patient to expect a death-penalty), the physician's role of inspiring confidence and restoring hope is of great importance.[4,14-16] The denial of illness as hope (whether or not realistic) that one will in the end be restored to the "exact condition" he was in before the onset of stress that led to the illness is universal. It is observable in every patient in the form of underestimation of the seriousness or of the effects or the extent of the illness. In most illnesses, our hope that our premorbid state should be restored, in fact, materializes and the process of convalescence stops at the stage of the denial of illness. This occurs in every illness from a "cold" to one that leaves damage of a kind not immediately apparent to the patient.* When we deal with such a reversible disturbance of normal function, convalescence, of course, terminates with the restoration of well-being. Where that is not the case, the process of adjustment to the loss continues in further convalescence, which will be discussed shortly.

A discussion of denial in *normal* convalescence is hard put to draw a line at any point for purposes of classification. In patients demonstrating mild disturbances, or insignificant losses, denial of illness is a barely perceptible defense mechanism; when the lost organ is heavily invested with feelings, or the individual identified with the diseased part, it becomes quite markedly pronounced. The influence of the premorbid personality and other factors clearly influence this reaction and lead to denial which in its extent cannot be called normal, yet for the purpose of this discussion, denial of any intensity, as long as it takes place during actual convalescence will be discussed, with normal recovery reactions. Only where it per-

*Incidentally, at times the physician, too, becomes drawn into the need to deny his patient's illness through his counter-transference feelings and identification with the patient. The physician's emotional involvement makes it necessary for him to *maintain* the denial at a considerable effort. A physician, for instance, who hospitalized a patient for "nervousness" when the patient showed a chronic brain syndrome on the basis of senile changes, was so adamant in insisting upon the denial that he objected to the patient's routine examination by the house staff. An act to the iota resembling the patient's own irritation and projection whenever a question was asked of her which could lead to the patient's betraying her loss of memory or giving any other evidence of her brain damage.

sists unduly will it be considered pathological.

It must be noted, however, that while many observations are available of the presence of denial *during the illness,* denial often precedes the onset of the manifest disease. Patients tend to ignore, and suppress awareness of symptoms for a long time. Many admit to being sick only when they are literally overwhelmed with the illness. For such patients the "onset" of the illness is the moment of breakdown of the denial. Thus the suddenness of onset of an illness, like the acceptance of the nature of it (e.g. knowledge that it is cancer) may be caused by the patient's fears. This may cause greater difficulty with mastering the awareness, and presage a long and persistent denial of the severity of the outcome of the illness later.

In an extensive descriptive work on the denial of illness, Weinstein and Kahn[17] have shown that the denial of illness can be so extensive as to involve the patient's demeanor, speech and activities. The patient may deny the evidence of illness or only part of it or its implications. He may minimize the extent of the illness and attribute his dysfunction to trivial causes. As part of the denial of the illness, the patient may have a selective disorientation as to the hospital and time of his illness (state that he has had it in the past). The same authors noted that the very language of the patient is used to deny the illness, by a selective paraphasia and a jocularity as well as the use of the third person in context with his illness (e.g., "they claim I have . . ."). Denial of illness may involve hallucinations, both positive and negative (i.e., ignoring a diseased organ) as well as many and varied compensatory and substitutive activities.[4,17-21]

The denial of illness has been most often described in patients with diseases of the central nervous system resulting in paralysis and/or aphasia[21,22] and loss of essential senses, i.e., vision and hearing. In fact, a number of terms have been coined to describe what had at first been deemed a specific reaction to left hemiplegia[23] and later extended to all central nervous system lesions.[30] Dealing with "disturbances of body scheme," Ives and Nielsen used the term "Gerstman Syndrome" as descriptive of denial of lesions affecting the major side of the brain.[24] Denial of blindness, total or partial, was termed "Anton's Syndrome" after the man who first described it in 1896[25] and has since been reported frequently under this term with or without other lesions being present,[26,27] as well as for denial of deafness.[28]

Several factors account for the conspicuousness of denial of brain lesions and loss of sensory organs. Firstly, the more highly valued the organ affected, the more extensive, persistent and urgent the denial.* Secondly, many of the brain lesions have at the onset a period of disturbed consciousness, which may vary from confusion to coma.[29] Often there is an amnesia for the period of denial, even though it ranges from "several days to one year".[30] The confusion at the onset of the illness makes it easier for the patient to deny his illness. There is, as it were, secondary gain in the confusion; it facilitates a denial of the traumatic new situation. Thirdly, in brain disease, there is an attendant diffuse brain damage, at least a transient disturbance of function, giving some effect of a chronic brain syndrome. The similarity of the denial of illness in hemiplegia to the behavior of Korsakoff's syndrome was pointed out by Schilder.[31] For our purpose, the significant change is the effect on the thinking processes, which is characterized by "Linearity of Consciousness,"[32] that is, that

*This intensity of organ cathexis varies with its actual importance for survival, its capacity as a source of pleasure or expressive activity and suitability for displacement fantasies—as a substitute for genitals. With internal organs of which the patients have no first-hand knowledge, e.g., the gall bladder or heart—a problem is created in convalescence. Patients often refuse to follow doctor's instructions (diet, rest) being unprepared to change the self-image since they are not aware of the change.

once an impulse or an idea enters consciousness, it is not tempered by any other thought that would modify it. Thus the impulse to deny illness easily overrides the tenuous acknowledgment of reality.*

The denial, however, cannot be maintained indefinitely by a patient who is in contact with reality, if the illness changes him in any way permanently. In order to understand what the patient was warding off by the denial, let us consider the following summary:

Case 37: Mrs. A.B. was a young wife and had recently given birth to a child. She had been very active in practically every form of athletics. The patient developed spinal poliomyelitis which resulted in almost complete paralysis of both her lower extremities. At the time of admission for rehabilitation (following the acute stage) the patient was cheerful and behaved as though she expected to regain all her function.

It soon became apparent that the patient would ignore any discussion of her disability and that her euphoric behavior was somewhat forced. One day, because of excessive activity on the patient's part, she was advised by the physiotherapist to stay in bed more. She became depressed and cried "throughout an hourly interview" with the social worker. She realized that she had been cautioned not to overexert herself, but she "forgot." She felt "frustrated" and "trapped" and feared that she could never take care of her housewifely duties. It was noted that the patient was avoiding speaking or in any way acknowledging the extent of her paralysis, and that if such awareness was forced upon her (e.g., through a visit home) she would become markedly depressed. At this time she started occupational therapy and chose to make a jewelry box and waste basket for her mother-in-law.

This behavior on the patient's part continued until she received braces, at which time she became seriously depressed. The depression became especially marked when she went home with her braces and found she could not do some of the chores, e.g., wash dishes. At this point she verbalized that she just could not accept the fact of her paralysis and that she was going to "work with it" until she regained all her muscle strength. In the subsequent work with the staff she was able to express much grief over her lost capacities. She finally was able to channel her energies to make the most of what she had left, appearing to accept her new condition.

In our working with the patient's husband, almost identical reactions were noted: at first denial, then grief, and finally acceptance of the new state of affairs.

The above description demonstrates that what the patient was warding off by her denial was a depression. That this danger is defended against by most patients is further illustrated in the frequency of reactive hypomania seen in patients in a similar stage of their convalescence.[38]

From these observations we must assume that each of our patients had to postpone any awareness that would force him into grieving until he felt secure against the danger of being overwhelmed with depression. When the patients start grieving their losses, they do it in steps, as it were, "a little at a time." Since the grieving is substantially aided by the doctor's empathy for the patient's ability for this process, this capacity of the doctor represents a significant part of the *art* of medicine.

As Freud described it, no object, property or ability can be given up without the work of mourning.[35] Mourning consists of a time-consuming, painful process involving the review of all the pleasant and dear things about the object, which are temporarily overvalued before they can be given up. This process is known to everyone who has lost a loved person. In the process of mourning, one goes through his memories as well as his hopes. Psychodynamically, this represents a withdrawal of the emotional energy (cathexis) which one had invested; this energy then becomes available for other purposes. For example, a widow who had a happy marriage and had loved her husband wholesomely, would after the mourning was accomplished be ready to "fall" in love again.

Whenever an illness changes the patient in any way permanently, he goes through an analogue of the process of mourning. An injury to one's appearance, loss of an

*The same defect may significantly diminish attention cathexes necessary for building a new image of the self.

organ, or capacity calls for the same type of shift in cathexis as the loss of a love object. The loss of an organ, limb or capacity requires withdrawal of cathexis from each "memory and hope" one had attached to the organ's executive or expressive function.[36] Robert Lynn,[37] in giving up smoking, describes a mourning not different from that following the parting of a dear person.*

Analogous to the work of mourning in the loss of a love object, the grieving in convalescence results in a withdrawal of cathexes from the mental representation of one's lost organ. The patient then has free libidinal energy available for investment in the new image of self, and in the seeking of gratification within his new reality. The completion of this process represents an active mastery of the illness and its effect.

IV. *New Body-Image Formation:*

With the work of grieving accomplished, and new "inventory" acknowledged, the unconscious meaning of illness as a punishment is no longer frightening as it was in the beginning, but now is a source of serenity. The improvement in late convalescence is accompanied by fantasies of having expiated "for one's sins."

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*Since the writing of this article, Blank described in a recent paper the importance of mourning in the acceptance of blindness.[38]

Levomepromazine in the Treatment of Chronic Psychotic Patients

JOSEPH A. BARSA, M.D., and JOHN C. SAUNDERS, M.D.

Levomepromazine is a phenothiazine derivative which has been used extensively in Europe since 1956 for the treatment of mental disorders.[1] The purpose of the present study was to evaluate levomepromazine in the treatment of chronic psychotic patients who had previously shown some response to other phenothiazine derivatives. In this way the relative efficacy of levomepromazine can be ascertained.

Two hundred fifty female patients between the ages of 13 and 71 were chosen. They had been continuously hospitalized for 2 to 32 years. Their diagnoses were as follows: 230 schizophrenia, 12 psychosis with mental deficiency, 6 involutional psychosis, mixed type, and 2 psychosis with epilepsy, deterioration. All of the patients had been receiving tranquilizing drugs uninterruptedly for at least a year prior to the present study, and had reached a plateau of slight to moderate improvement. One hundred twenty-nine patients had received chlorpromazine, 43 thioridazine, 30 trifluoperazine, 27 fluphenazine, 14 prochlorperazine, 6 perphenazine and 1 triflupromazine.

At the start of the study the patients showed a variety of behavior. Although all were delusional and/or hallucinating, some were tense, agitated, irritable and hostile, and approximately an equal number were withdrawn, flat in affect, preoccupied and disinterested. The patients' previous medication was discontinued, and they were placed on levomepromazine at starting dose of 25 mg. q.i.d. The dosage was gradually increased until either a maximum therapeutic efficacy was achieved or disturbing side effects appeared. The highest dose used was 250 mg. q.i.d. The patients received levomepromazine for 3 to 12 months, and at the end of this period they were evaluated in regard to changes in mental symptoms. Twenty-five patients were considered markedly improved, i.e., in remission, free of delusions and hallucinations, and ready for release from the hospital. Twenty-eight patients were moderately improved as compared to their condition just prior to this study; 40 were slightly improved, 67 were unchanged, and 90 patients seemed worse on levomepromazine in that their delusions and hallucinations became more pronounced. It was observed that those patients responded best to levopromazine who were characterized by marked tension and excitement, and in whom delusions or hallucinations were less prominent.

Side effects were as follows: Early in therapy 16 patients developed feelings of weakness and faintness together with a fall in blood pressure; 15 patients complained of dizziness, 5 of nausea, and 6 of generalized tremulousness. These early side effects commonly disappeared spontaneously without discontinuing medication, and they usually could be prevented by starting with a low dose and increasing the dose very gradually. Later in the course of therapy, extra-pyramidal side effects became more frequent. Ten patients showed signs of parkinsonism, such as drooling, rigidity and tremor. Two patients experienced oculogyric crises. However, the most common extrapyramidal symptoms were akathisia and dystonia. Thirty patients showed signs of akathisia. One patient developed spasmodic torticollis and 32 patients developed a tilt to one

From Rockland State Hospital, Orangeburg, New York.

Levomepromazine was supplied by Lederle Laboratories, Pearl River, N. Y.

side, involving the trunk, shoulder girdle and neck. This latter side effect would appear suddenly, would be unrelated to dosage (some patients were receiving as little as 25 mg. t.i.d.), and was frequently accompanied by increased restlessness and agitation. Extrapyramidal symptoms were treated with benztropine methanesulfonate (Cogentin), but in many instances, especially in dystonia, the dose of levomepromazine also had to be reduced. The most frequent limiting factor in attaining a maximum dose of levomepromazine was excessive sedation. Finally, it should be mentioned that one patient developed hepatitis after three months of therapy and while receiving 50 mg. q.i.d. As soon as the drug was discontinued, the patient made an uneventful physical recovery.

In summary, levomepromazine is an effective psychotropic drug in the treatment of psychotic patients. It has a stronger sedative effect than chlorpromazine, but a weaker anti-psychotic (i.e. antidelusional and antihallucinatory) effect. Thus, it is most useful in the treatment of patients who show marked tension and anxiety, but in whom delusions or hallucinations are not prominent.

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There is a curious oversimplification of our picture of ourselves. . . . It consists in our assertion that we are rational individuals rather than total individuals. . . . In consequence of the oversimplification . . . which this myth has occasioned, many difficulties are created. Among them is the will power myth—the idea that you can do anything that you want to, provided you try hard enough. Anxiety, guilt and endless frustration are produced. . . . In the process of repressing what seemed irrational, we have lost a great deal . . . particularly in our potential creativeness . . . in our capacities to understand ourselves and each other. . . . Once we have learned to accept what we have so sedulously repressed, once we have made friends with the man within us, we find him far from threatening—and, in very fact, the completion of our nature.

D. Ewen Cameron
Medicine and Other Specialties
International Universities Press, N. Y., 1960.

The Effects of Hypnotically-Induced Emotions on Continuous, Uninterrupted Blood Glucose Measurements

A Preliminary Evaluation

CHARLES WELLER, M.D.,* MORTON LINDER, M.D.,* WILLIAM NULAND, M.D.† and MILTON V. KLINE, ED.D.‡

The psychophysiological effect of emotions on blood glucose has been studied by means of a variety of experimental techniques. The exact nature of this interaction has not yet been clearly defined. Previous studies by others have utilized stress situations, produced by reenactment and discussions of events which were known to be of emotional significance to the subjects. All physiological measurements were done intermittently, necessitating frequent venipunctures. It has previously been shown that hypnotically-induced emotions can be physiologically and psychologically equivalent to emotional reactions experienced on non-hypnotic levels.[1-3] The hypnotic method provides the means for quantitatively determining the effects of specific emotions on physiological functions. It has been demonstrated that the volume of gastric-secretion of free and total acid can be influenced by hypnotically-induced emotions.[4] Other investigators have shown that adrenal cortical and corticotropin hormone secretion are altered by hypnotically-induced anxiety states.[5]

It can be postulated that emotions will alter the secretion of these hormones and thus influence the blood glucose concentration. It was the purpose of this investigation to explore and evaluate the effects of hypnotically-induced stress situations on blood glucose in both normal subjects and diabetic patients.

Patients selected for this study had well established diabetes of the keto-acidotic resistant type and were metabolically compensated. Normal subjects were selected as controls who had no evidence of diabetes. During the period of observation, some were studied in the fasting state and others in the postprandial state.

The chemical monitoring of true blood glucose concentration was achieved by means of the autoanalyzer. This method permitted uninterrupted, continuous measurements of the blood glucose during the total period of observation with a variation of 2 mgs.% Changes in blood glucose levels lasting for 30 seconds or longer can be accurately recorded, as illustrated by Figure 1. This graph was taken directly from the autoanalyzer set at the same range and using the same cannula and glucose standard as is usual in the test subjects.

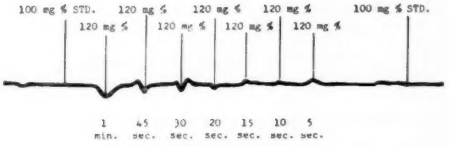

Figure 1.

Hypnosis in both patient and control groups was induced with an ocular fixation technique in a manner most conventionally utilized in both clinical and experimental settings. A standardized procedure for the induction of anxiety, anger and excitement was based upon a modification of the procedure previously used and reported upon by Eichhorn and Tracktir[4] and Levitt and Persky[6] in their studies

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Presented in part at the Fourth Congress of the International Diabetes Federation, Geneva, Switzerland, July 11, 1961.

of induced emotion and its effect upon psychological and physiological functioning. This technique is in itself an elaboration of the original method reported by Gidro-Frank and Bull[9] in their study of emotions induced through hypnosis. The subjects in this study experienced hypnotically-induced emotion of intense anger, fear and excitement with alternating periods of relaxation between separate emotions. Reversed order of induction of the emotion was brought about in alternate subjects. In most subjects the induced emotion was maintained for ten to fifteen minutes, though in a few cases the induced state was maintained for as long as one hour.

In addition to clinical observations of the subjects' behavior and the continuous measurement of blood glucose levels, an inquiry was undertaken following the induction of each specific emotion and the patients' verbalizations were taken down on a tape recorder.

The patients and subjects selected for this study were all capable of relatively deep levels of hypnosis, and responded to the procedure for the induction of emotion as previously reported with this technique. Clinical behavior included marked changes in facial expression, spontaneous verbalizations and an acting out of behavior through observable shifts in affect, ideation and posturing.

Clinical responses to the emotions induced in the patients and subjects included crying, perspiring excessively, shouting and becoming visibly agitated.

One subject experienced an hallucinatory reaction following the induction of intense anxiety during which he spontaneously abreacted an earlier traumatic military experience.

Through clinical inquiry, observation and analysis of spontaneous verbalizations on the part of the subjects involved in this study, it would appear that the feelings induced with the hypnotic procedure resulted in intense emotional reactions with considerable influence on associative and ideational processes. Both anger and fear appear to be more disrupting than excitement.

The maintenance of blood glucose levels depends upon a balance between the amount of glucose absorbed and removed for storage or consumption by the tissues.

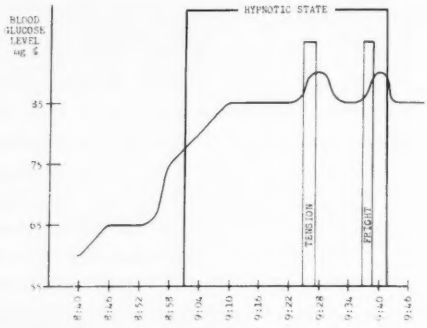

Figure 2. E.E., a twenty-one year old white male, in good health, without evidence of any disease processes. The measurement of his blood glucose was started three and a half hours after his regular meal, and at that time it was 60 mg. %. It gradually increased and was rising when hypnosis was induced. Hypnotically induced violent tension was produced and his blood glucose value rose 5 mg. %, while this tension state was maintained for four minutes. It then decreased to 85 mg. %, and started to increase again upon induction of hypnotically-induced fright. Again, his blood glucose rose 5 mg. %, and promptly dropped down to a baseline of 85 mg. %. The rise of only 5 mg. % is probably not a significant reaction.

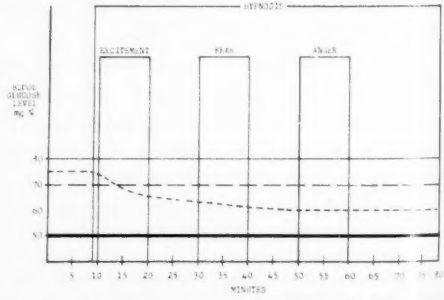

Figure 3 represents a composite of four normal, nondiabetic subjects in whom the standard procedure for states of fear, anger and excitement were induced with the standardized hypnotic procedure. There was no significant change in their blood glucose measurements.

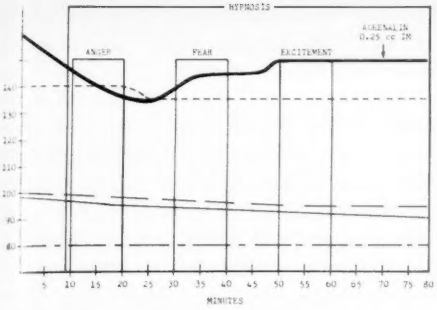

Figure 4 represents a composite graph of five keto-acidotic resistant diabetic subjects, studied in a fasting state. One quarter cc. adrenalin was given intramuscularly to these subjects with no apparent rise in their blood glucose. This may be the result of poor absorption. During the study of these individuals, there was no significant change that occurred in blood glucose levels with any degree of regularity, demonstrating homeostatic mechanisms at work maintaining constant blood glucose values.

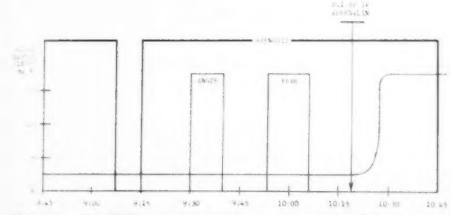

*Figure 5, **E.E.**,* a twenty-one year old normal male, in a fasting state. His blood glucose level was 85 mg. %. He experienced intense hypnotically induced emotions of fear and anger through a method of induced conflict without any effect on his blood glucose. He was then given 1/10 of cc. of adrenalin intravenously, and his blood glucose rose promptly to a level of 110 mg. %. His pulse rate went up to 120 and his blood pressure rose from 130/80 to 220/90, and appeared to have the usual clinical manifestations of adrenalin reaction.

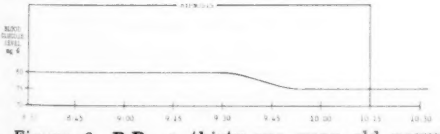

*Figure 6, **P.R.**,* a thirty-one year old normal male whose blood glucose of 80 mg. % was measured two and a half hours after his regular meal. Under hypnosis he was regressed to five years of age. During this period, his blood glucose level dropped only five mg. % and remained at the lower level for the entire duration of the experiment.

Homeostasis is maintained by complete reactions including hormonal and enzymatic actions. During a period of stress, there is an increased secretory activity of the sympathetic nervous system, notably secretion of epinephrin. This should increase the rate of liver glycogenolysis, and hence increased blood glucose. A concurrent rise in glucocorticoid secretion by the adrenal corticies should also theoretically increase blood glucose levels. It has been shown by others that hypnotically-induced anxiety states may at times cause an increase of serum hydrocortisone levels especially in the female subjects.[5] Apparently, the blood glucose level when measured continuously, is not influenced by these mechanisms, and remains in a state of homeostasis, especially in the nondiabetic individual. It was previously reported that this homeostasis is not present to such a great degree in the diabetic individual.[10] However, we studied only very mild keto-acidotic resistant diabetic subjects in this investigation. These individuals are very close to normal subjects metabolically and have only a slight derangement of their carbohydrate metabolism especially when they have been in a state of metabolic compensation. According to Hinkle and Wolf,[11] life situations interpreted as a threat to physical or mental security, set in motion neurally controlled and unvolitional adaptive responses, which result in changes in venous blood sugar, increased ketone production and increased diuresis. All individuals make such responses, but in the diabetic, they showed more pronounced fluctuations in these parameters, than in nondiabetic individuals. They studied the short term effects of emotional changes by setting up interviews designed to make the patient feel respectively apprehensive and insecure or relaxed and secure. No definite relation could be established by them between a particular emotional state and these physiological responses. Nevertheless, anger, resentment and feelings of

being rejected and unloved appeared to stimulate the same physiological responses, which the body normally makes to starvation (physical deprivation), namely conservation of blood sugar and greater utilization of fat with ketone production.

Our results of venous blood sugar measurements are not in accordance with their findings. There were no significant fluctuations of blood glucose in our selected subjects when subjected to hypnotically-induced emotional stress. There seems to be little doubt of the intensity of the hypnotically-induced emotions. The lack of significantly demonstrable changes in blood glucose levels in both the normal subjects and mild diabetic patients may be due to the effect of the constant, undisturbed homeostatic mechanisms involved in maintaining the blood glucose levels, when measured by these techniques. Previously reported changes in blood glucose under induced emotional stress may have to be re-evaluated in relation to the procedures under which they were determined and the experimental population.

SUMMARY

The effects of experimentally induced emotions on blood glucose levels were studied in normal subjects and mild ketoacidotic resistant diabetic patients. The methods used included a standardized technique of hypnotically induced anger, fear and excitement, while continuously measuring blood glucose concentration. Blood glucose levels were not significantly influenced by hypnotically-induced emotions. It is postulated that physiologically active homeostatic mechanisms in controlling blood glucose appeared to be unaltered in both the normal and mild diabetic subjects of this study. Only further study in dissection of these homeostatic mechanisms will delineate their importance in the body's response to emotions.

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No community general hospital should be regarded as rendering a complete service unless it accepts mental patients for short-term hospitalization and therefore provides a psychiatric unit or psychiatric beds. Every community general hospital of 100 or more beds should make this provision.

Action for Mental Health
(Recommendation of the Joint Commission on Mental Illness & Health, Basic Books, 1961, p. 265.)

Psychodynamic Observations in Psychopharmacology

DOUGLAS GOLDMAN, M.D.

Most of us who have lived through the early experience with organic therapy of psychotic illness with insulin, metrazol and electroshock, have recognized that psychotic illness itself is unapproachable for all practical purposes by any verbal psychotherapeutic process. It has always been necessary to relieve the underlying dysfunction to which the psychotic manifestations are related, directly or indirectly, before any approach to dynamic psychologic and emotional mechanisms can be made. It is also true that these psychologic and emotional mechanisms, which we speak of as "psychodynamic," were not very much relieved or brought to light with electroshock and insulin because of the production of organic confusion by these older modes of treatment. However, even with the first patients under the newer drug therapy, it became evident that in many, particularly those who were sufficiently intelligent and communicative, the underlying emotional disturbances came closer to the conscious level and were revealed to the patients themselves and to the perceptive physician by the drug effect. Such revelation was not always without discomfort and at times was itself productive of further emotional reaction which required treatment.

The clarification of these ideas will be attempted through individual case reports. The earlier instances of response to drug therapy seemed more dramatic, naturally, since we were not accustomed to the kinds of response that were emerging.

CASE HISTORIES

Case I, an early example, was a patient in the state hospital. His diagnostic label was "paranoid schizophrenia." He had become extremely difficult to manage and was admitted to the hospital as a last resort, since his family was considerably antagonistic to the idea of the state hospital. He at first responded very rapidly to chlorpromazine, and then failed to return from a week-end pass. He was returned forcibly with police help after he had again become too disturbed for the family to manage. He responded very rapidly to resumption of chlorpromazine therapy which he had, of course, discontinued when he left the hospital on the pass. As he became more approachable, he was interviewed. The patient had complained of hearing voices, of people influencing him. This had become particularly productive of violent reaction in a department store when he was on an escalator. The entire escalator seemed to be calling him names, or talking to him in disparaging or threatening terms, and propagating radio waves in his direction. In the course of the interview, he revealed that he had served in the South Pacific on submarine duty. The hum of the submarine generators and engines was extremely similar to the hum of the escalators in the department store. The patient was able at that point in the interview to recognize that he had been under considerable stress and threat in the submarine service, that the hum of the generators and motors had come to symbolize the threat of the situation, and that it was the inopportune exposure to the noise of the escalator so reminiscent of the submarine, which had triggered the psychotic episode. From this interview on, the patient continued to improve at a rapid rate with the help of the medication and there was no further difficulty with A.W.O.L.'s. He has since been discharged from the hospital and has been employed regularly for the last four years. If he sees me on the street in the downtown area now, he makes a particular effort to cross the street to exchange greetings and a few words in a warm and friendly manner. It is evident in this patient that the psychotic mechanisms of projection and displacement revealed themselves when the suppressive psychologic mechanisms were put at rest under the influence of a truly psychotherapeutic drug.

Case II demonstrates that even deeper and more primitive mechanisms can, under favorable circumstances, be revealed. A patient who was suffering from various somatic complaints, irritability and some level of depressiveness, had become so disturbed that hospitalization was necessary. Her long-term complaint had been re-

Presented at the 7th Annual Meeting of the Academy of Psychosomatic Medicine as part of a Symposium on "Drugs and Psychotherapy," October 14, 1960.

curring episodes of nausea and epigastric pain. These had in the past responded somewhat to adrenal cortex hormone and undoubtedly there was periodic adrenal cortical deficiency as revealed by low output of ketosteroid hormones and disturbed sugar tolerance. In the hospital she was given chlorpromazine in moderate dosage, 50 mg. q.i.d. She seemed to be improving somewhat for two days; then suddenly during the night she developed excruciating periodic lower abdominal pains. The patient became so disturbed by these, that it was necessary to give the chlorpromazine intramuscularly in somewhat larger amounts for two doses. She then was able to discuss the pain. The day was her birthday and what she was experiencing, she believed, was her deceased mother's labor pains when she, the patient, was born. The patient at that time was in her middle 30's and had previously over a considerable period revealed a good deal of conflict which could be interpreted as "Edipal" if an orthodox catechistic attitude were adopted.

Case III, the widow of a physician, who had been a troublesome personality for many years had, in her menopausal years, become considerably paranoid. In her estimation, the world had apparently combined against her; the good Catholic hospital had become a nest of Communists who were trying to indoctrinate her. The word "indoctrinate" apparently was a paranoid neologistic play upon the word "doctor." Voices were evident in the walls and were coming to her from upstairs and downstairs. She had not responded at all to electroshock, to electronarcosis, and the anticonvulsant medication which her previous physician had given to her. Shortly after, when chlorpromazine was administered, she became somewhat more quiet, but for the first four weeks there seemed to be no change in her paranoid ideation. As the dose was raised to an effective level, approximately 600 mg. per day, she reported to the previously extremely skeptical supervising nurse that the world had suddenly changed; she realized there were no Communists in the hospital, that her paranoid ideas must have been "sick notions." She continued to improve markedly and was able to leave the hospital in reasonably good condition. It was, however, necessary for her to return within a few weeks because she was anxious, somewhat agitated and possibly a little depressed. None of the paranoid notions had returned. It was clear that the anxiety and agitation must be interpreted as being related to the loss of the paranoid functioning. Whether this was reactive anxiety built up because of the inability to use paranoid mechanisms or whether it represented the underlying anxiety which had produced the paranoid mechanisms, it seems futile to try to decide at this time. She responded promptly to two or three electroshock treatments which had never previously helped. Her subsequent course for the next five years was somewhat checkered to begin with, since she often stopped taking medication at her own discretion. However, recently, for the last 15 months, she has maintained an excellent status and has obtained for herself suitable employment in a gift shop in spite of the fact that she is in her seventh decade. She is getting along well with small doses of Trilafon and Tofranil. There has been no tendency, however slight, to recurrence. Her most recent visit, about six weeks ago, revealed a degree of insight which never might have been expected in the old days. She said that she had never previously felt as comfortable and she only wished she had been able to take the medicine which has made her see the world in its true light when she was younger, so that she could have made her husband and family happier.

Case IV was an extremely paranoid schizophrenic patient of lower economic and educational status who responded dramatically to the administration of Trilafon. She had been hearing voices that she spoke of affectionately as her "little gremlins." She heard accusing remarks coming from the gas jet in the stove, and was generally feeling exploited and tortured by the world. In the interview following and during administration of Trilafon, she revealed some of the sources of her emotional discomfort. She had had some premarital sexual exposure and during her marriage had had an illegal abortion for a pregnancy which presumably had not been initiated via her husband. These incidents in her life and possibly others had produced anxiety and the consequent projection of guilt and hostility which she felt toward herself, with displacement to inanimate objects of the accusing voices which originated within her. All of this was, of course, relieved under the medication, which, after two relapses from discontinuing medication, she now refuses to discontinue under any circumstances.

Case V was a man of lower educational status who was a skilled workman for the local electric public utility. He had suffered a fall from a ladder on a service truck when he was repairing some overhead wires in icy weather, and for at least four years had been carrying on a to-and-fro battle with the company over adequate compensation and relief for this difficulty. Enlightenment came slowly in all quarters apparently, but he was finally referred for psychiatric help. There was no question regarding the fall and that it had been productive of immediate injury;

however, there was no residual evidence of injury in roentgenographic examination, myelography and at least three orthopedic examinations by different physicians. It was revealed in the early interviews that the patient had, at the time of the accident, been having severe domestic difficulty. His wife of many years, mother of his three children, had been unfaithful, had deserted him, and he had consented to the procurement of a divorce. He continued to have strong feelings of resentment and anger regarding the entire affair, but maintained a good relationship with his children who are still loyal to him. The emotional disturbance of the period had obviously been absorbed into the mechanism for the production of the painful back. Therapy with prochlorperazine was initiated, at first at a mild level, then as the patient responded moderately, the dose was increased to 20 mg. q.i.d. This was productive of what would have been considered turbulence under any circumstances, but this turbulence when further closely examined, consisted of early manifestations of parkinsonian rigidity combined with the discomfort of emotional revelation. The parkinsonian element was, naturally, brought under control readily with small doses of Cogentin. The emotional element was, however, somewhat less readily managed. The patient was, as his occupation would demand, a rough and ready person of an emotional make-up that would allow no soft sentiment. With a little help, however, he was tearfully able to reveal that he felt extremely sorry for himself, that this condition of self-pity was tied up with the emotional storm associated with his former wife's bad conduct, and that this was tied in with his painful back. He reluctantly recognized that he was unwilling until that moment to allow himself the luxury of grief, and the tension associated with this long suppression of emotion undoubtedly made his back worse. The improvement in his somatic symptoms was accelerated from that point. He has been able to get along without his brace and even has a more tolerant relationship with his employer. He himself indicates the nature of the change in his status by telling of his return to church.

Such instances of development of understanding of complex emotional mechanisms on the part of patients, usually with the help of the attentive psychiatrist, could be multiplied ad infinitum. They must be frequent in every psychiatrist's experience. In the same context, the problems from certain drug effects that would produce discomfort and anxiety, as have been described by Sarwer-Foner and others, must in every instance be further pursued for the patient's benefit, since it is evident in most of these instances that actual improvement is revealed to the perceptive physician, even though the patient may be temporarily more uncomfortable.

The knowledge that is developing in this area, as indicated in the foregoing case reports, seems to reveal that psychosomatic illness and psychotic reactions result from mixed emotional, psychologic, and neurophysiologic mechanisms involving distortion of perceptive and cognitive functions of extero- and enteroceptive origin, and of efferent functions associated with these. It is the physician's role to recognize and differentiate the elements of these disturbances and to direct appropriate treatment to their relief. The recently achieved improvements in the functioning of such patients as well as in the therapeutic constructive relationships seen between psychiatric patient and physician must be attributed in large part to the use of the newer drugs.

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ERRATUM

In *Psychosomatics*, Vol. 2, No. 4, page 309, an error appears in the abstract of the article "Effects of Imipramine (Tofranil) on Depressive States" by H. Azima and R. H. Vispro, originally published in the A.M.A. Archives of Neurology and Psychiatry, Vol. 81, pages 658-664.

The first sentence should read: The authors noted an over-all improvement rate of 83% in 98 patients with depression, 52 of which were classified as psychotic.

Fluphenazine as a Psychotherapeutic Agent in Private Psychiatric Practice

(A Clinical Report)

LAURA E. MORROW, M.D.

The advent of the so-called tranquilizing drugs has had a profound influence on psychiatry, as even a casual review of the literature will confirm. Not only has there been unprecedented activity in the field of psychopharmacologic research,[1-4] as an ever-increasing number and variety of new drugs are developed and introduced[2,3] but the use of these drugs has been accorded a more prominent role in psychotherapeutic procedures than ever before.[3,6] Moreover, through use of these drugs more hospitalized patients have been returned to society than under any previous therapeutic program.[3]

The largest group of tranquilizing agents offered to the physician so far is the phenothiazine family of chemicals which, beginning with chlorpromazine, has now grown to include at least 10 substances in clinical use.[2,4,6] One of the newest members of the series is fluphenazine, a trifluoromethyl hydroxyethyl piperazine propyl derivative of phenothiazine. Fluphenazine is the most potent phenothiazine derivative yet developed.[7,8] In clinical studies, it has exhibited a rapid and sustained action with beneficial effects on psychotic symptoms.[4,7-9]

Over the past two years, fluphenazine (Prolixin) has been administered to patients with a variety of mental disorders who reported to this office for treatment. In such use, fluphenazine proved to be a highly useful drug, especially in facilitating psychotherapy of these patients.

METHODS AND MATERIALS

The present report concerns a total of 174 non-hospitalized private patients who were treated with fluphenazine for periods varying from 1 week to 24 months. Of these, 16 were children between the ages of 4 and 16 years; 158 were adults ranging in age from 19 to 79 years. Of the 158 adults, 101 were less than 45 years old. All of the patients had mental disorders, primarily chronic in nature, though the majority displayed acute symptoms for which treatment was sought. The disorders in 69 of the 174 patients were characterized by a variety of psychotic manifestations such as confusion, delusions, hallucinations, ideas of reference, withdrawal and/or morbid depression or morbid fears, while 105 patients presented symptoms of emotional disturbances chiefly manifested by anxiety, tension or depression which, in some instances were quite severe. The diagnoses of conditions found on initial examination in both psychotic and psychoneurotic patients are shown in Table I.

All but a few of the patients with psychotic disorders had received previous psychiatric treatment which had included other tranquilizing agents (usually other phenothiazine derivatives) before they were placed on fluphenazine. Approximately a third of the patients had undergone electroshock therapy, usually in hospital, during previous acute episodes of their illnesses. The emotionally disturbed patients had in the majority of instances also received one or more tranquilizing drugs as well as psychotherapy, and other psychotherapeutic measures.

The Medications

Fluphenazine was administered either intramuscularly or orally. Individual intramuscular doses of fluphenazine ranged from 0.5 mg. to 2.5 mg., given once or twice a day, while oral doses of the drug

were usually administered as a single tablet containing 1 mg., 2 mg. or 2.5 mg., once or twice a day. In only five cases were more than 5 mg. per day prescribed: a daily oral dose of 7.5 mg. was prescribed (with excellent results), for two severely disturbed patients; three other patients were placed on a daily oral dose of 10 mg. during the early phase of the study before the "therapeutic limits" of dosage had been established for the drug. Treatment was continued in the majority of cases for at least two months, and in about half of the cases for at least six months, while approximately 20 per cent of the patients received fluphenazine for a year or more, and in a few cases for as long as two years.

Other medications such as antidepressants, amine oxidase inhibitors, sedatives, antacids or sedatives, as well as antiparkinsonian drugs were either continued or added to the dosage schedule as indicated, and in some cases other tranquilizing drugs were also given concomitantly to control symptoms. In addition, each patient received psychotherapy throughout the period of observation.

RESULTS

The therapeutic results observed in the patients who received fluphenazine, usually as ancillary medication during psychotherapy, are shown in Table I.

It is obvious from this table that of the total group, 167 were treated long enough to be evaluated and that 117 of the 167 patients who were evaluated (70%) responded satisfactorily to treatment with either "excellent or good" results—that is, they displayed a good recovery from the present attack of illness with com-

TABLE I

Results with Fluphenazine in 174 Psychiatric Patients

Diagnosis of Disorder Present	No. of Pts. Treated	*Results*				
		Excellent	Good	Fair	Unimproved	Not Evaluated*
I. IN PATIENTS WITH PSYCHOTIC DISORDERS						
Schizophrenic Reaction	37	18	9	3	7	–
Pseudoneurotic Schizophrenia	10	1	6	1	1	1
Psychotic Depressive Reaction	12	5	2	3	2	–
Manic Depressive Reaction	4	4	0	0	0	–
Paranoid Condition	3	2	0	1	0	–
Involutional Psychotic Reaction	3	0	1	1	1	–
Total	69	30	18	9	11	1
II. IN PATIENTS WITH PSYCHONEUROTIC AND PSYCHOSOMATIC DISORDERS						
Psychoneurosis	27	7	11	4	4	1
Anxiety Reaction	18	6	4	1	5	2
Conversion Reaction	3	1	0	1	1	–
Phobic Reaction	6	2	3	1	0	–
Obsessional Reaction	4	2	0	1	0	1
Depressive Reaction	23	13	6	2	2	–
Tension-Depression Reaction	4	1	0	0	2	1
Psychophysiologic Reaction	4	0	1	1	1	1
Miscellaneous	16	8	4	2	2	–
Total	105	40	29	13	17	6

*Treated for too short a time to permit evaluation.

plete or almost complete loss of symptoms for which they had sought treatment. In general, these patients experienced an increased sense of well being accompanied by a restoration of their "normal" capacities to perform such duties as housekeeping, caring for children, holding an outside job, socializing, or accepting daily problems and responsibilities. A few of the patients said that they felt better than they had in years. Among those showing "excellent" or "good" responses were a number of patients with long histories of hospitalization during which they had received electroshock therapy and high doses of established psychopharmacologic drugs with varying measures of success. Essentially the same proportion of the psychotic patients responded satisfactorily to treatment as of those with psychoneurotic and psychosomatic disorders. An additional 22 of the 174 patients in the series (12%) exhibited some improvement after treatment, as manifested by increased cooperativeness with the therapist and some relief of symptoms, but the responses in these patients were considered to be only "fair." The remaining 35 patients in the series derived little or no benefit from therapy. Some were transferred to other medication, but others discontinued treatment without the advice of the therapist or they were treated for too short a time to permit evaluation of therapeutic results. One of the 35 patients who failed to benefit exhibited an accentuation of depression after treatment with fluphenazine, but this was the only patient in the series whose condition worsened.

No intolerance to fluphenazine was observed in 131 of the 174 patients, but unwanted reactions developed in 43 patients, as shown in Table II.

Aside from wakefulness in approximately 20 per cent of cases, the most frequently observed side effects were extrapyramidal reactions; all of these effects could in most cases be controlled by reducing the dose, and/or adding methanesulfonate (Cogentin) or other antiparkinsonian drugs to the regimen. In 14 of the 43 patients, however, the side effects were the source of such great discomfort to the patient that treatment was discontinued, either by the therapist or by the patient himself.

ILLUSTRATIVE CASES

The clinical responses to fluphenazine in three representative cases are briefly described:

TABLE II

Unwanted Effects Recorded in 43 Patients Treated with Fluphenazine

	No. of Patients*	Drug Stopped** (No. Patients)
Parkinson-like Symptoms:		
"Shakes" of legs, hands, fingers	11	
Increased salivation or drooling	6	
"Rubbery" legs	3	1
Stiffness of muscles	3	
Tension	3	1
Leg cramps	2	2
Parkinsonism	2†	
Oculogyric crisis	1	1
Blepharospasm	1	
Staring	1	
Reactions to Anti-Parkinsonian Drugs:		
Blurred vision	3	1
Dry mouth	3	
Sore mouth	1	1
Inability to focus eyes (occasional)	1	
Other Reactions:		
Wakefulness	38	
Restlessness	3	1
Nervousness	3	2
Akathisia	3	3
Dyskinesias of face	2	1
Nausea	2	
Jumpiness	1	
Sweats	1	
Sleepiness	1	

*More than one effect was observed in a number of patients.

**Discontinued by either the therapist or the patient.

†Aggravation of parkinsonism already present in one patient.

Case 1: A.D., a married male, 35 years old, with a recurrent paranoid condition of six years' duration, sought treatment because of persistent and severe headaches and eye pains. His delusions about his wife's infidelity had caused many violent scenes at home. Treatment with CPZ (chlorpromazine) alone and later with meprobamate proved to be ineffectual. When 1 mg. of fluphenazine twice a day was added to the latter, the patient showed steady improvement. After a month, the dose of fluphenazine was reduced to 1 mg. a day and this dose was continued for three months during which time the patient attained complete remission, lost all his delusions and reverted to his self of ten years before. The patient was discharged at the completion of a total of four months treatment with fluphenazine used adjunctively with psychotherapy. He has remained on 1 mg. daily for one and a half years with no further complaints.

Case 2: J. de F., a female, 48 years old, with acute depressive reaction sought treatment because of insomnia, depression, anorexia, restlessness and anxiety which had persisted for six weeks. The patient cried easily, was fearful of being alone, could not perform her usual household activities or even watch television programs. During a previous attack some months before, the patient displayed extreme resistance to electroshock therapy—to which she would submit only after the intravenous administration of sodium amytal—showing significant response (normalization) only after 30 treatments had been received. During the present attack the patient was placed on 5 mg. of fluphenazine twice a day. She was also given electroshock therapy without the necessity of administering sodium amytal. She showed definite improvement after the third treatment and "normalized" after the tenth shock treatment. The patient developed parkinsonism soon after treatment with fluphenazine began and later complained of insomnia, but these effects were controlled by the administration of methanesulfonate (Cogentin) 2 to 2.5 mg. a day and reduction of the dose of fluphenazine to 4 mg. and finally to 2 mg. a day. Throughout the 16 months of treatment the patient has maintained her improvement, doing all her housework, laundry and cooking for a family of seven people.

Case 3: L.S., a 40-year-old married woman, with schizophrenia, paranoid type, was referred for treatment because of multiple paranoid delusions and elaborations as well as bizarre dietary habits which had persisted for four months. She was extremely restless and would wake her children at night to see whether they were still breathing. During a five-year period prior to the present attack, the patient had received over 140 deep-coma insulin treatments and had improved but had never become "normalized." She was placed on electroshock therapy with chlorpromazine (175 mg./day) and got along well but complained of excessive sleepiness. Fluphenazine was then added to the schedule in a daily dose of 1 mg. which was gradually increased to 3 mg. while the dose of chlorpromazine was gradually decreased and finally discontinued. After fluphenazine was added, the patient said she felt less exhausted and had more time for herself. She continued to improve with psychotherapy and fluphenazine and, after a month, the dose of fluphenazine was reduced to 2.5 mg. a day, this being continued for nine months to the time of report. The patient was never so well; she was not tempted to abandon the drug during the summer time as she did with chlorpromazine because of burning of the skin while sunbathing.

DISCUSSION

The findings recorded in the patients in this series lead to the impression that fluphenazine is a very effective tranquilizing agent when administered as ancillary medication in patients with a variety of mental illnesses. Psychiatric symptoms were either dispelled or relieved so that the patients could return to more "normal" daily living in 70 per cent of treated cases. Effective psychotherapy was generally facilitated, patients who had been resistant became amenable. There was remarkable —even spectacular—improvement in some patients with long histories of mental illness including previous drug therapy and electroshock treatments. In some cases the addition of fluphenazine reduced the number of electroshock treatments required to attain remission. This was especially true in a few very depressed patients. In the dosage used, the drug was generally well tolerated. Seventy-five per cent of patients exhibited no reaction whatever on therapeutic dosage. While reactions were recorded in 25 per cent of cases they could in most instances be easily controlled. The most frequently observed were Parkinson-like symptoms and wakefulness, which in most cases disappeared following the administration of methanesulfonate (Cogentin) and reduced dosage. A very pleasant side effect was a feeling of alertness reported by

many patients. This was especially helpful in rehabilitating those who had been on large doses of chlorpromazine, although insomnia developed in some instances. The absence of skin rash or excessive burning on exposure to the sun, the rarity of the occurrence of akathisia, the absence of observable liver damage, as well as the almost universal relief of gastrointestinal distress in the treated patients made the drug especially useful. Several patients obtained relief from longstanding migraine headache or severe headache associated with the menses. Several others with severe allergies, including generalized urticaria, also became symptom-free. One of these patients had received previous adrenocorticosteroid therapy without any relief from allergic symptoms.

SUMMARY

Fluphenazine (Prolixin) had been employed as a tranquilizing agent in 174 nonhospitalized private patients in daily doses of from 0.5 mg. to 20 mg. for from 1 week to 24 months. Of the total group, 167 were treated long enough to evaluate the efficacy of the drug being administered. A total of 117 of the 167 patients evaluated (70%) improved with complete or almost complete relief of symptoms for which they had sought treatment, generally accompanied by a restoration of their "normal" capacities to work, to perform household duties and to accept daily problems and responsibilities in a conventional manner. Seventy-five per cent of patients showed no intolerance to fluphenazine whatever in the dosage employed. Reactions occurred in 43 patients (25%), wakefulness and Parkinson-like symptoms being the most frequently observed. These effects in most cases were easily controlled by reducing the dose and/or the administration of methanesulfonate (Cogentin) or other antiparkinsonian drugs.

Fluphenazine (Prolixin) is a highly effective tranquilizing agent which may be administered safely to office patients with a variety of psychiatric illness.

197 Passaic Ave., Passaic, N. J.

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The contemporary goal in science is not to find ultimately truthful theories but rather to find theoretical notions which are useful as policies to be followed. The goal is no longer to find a truth to believe in but rather to find a consistent policy by which to guide action until further experience yields a better policy.

James B. Conant
Modern Science & Modern Man
Columbia, N. Y.

Notes and Comments

COMING MEETINGS OF INTEREST

New York State APA Meeting

The New York State Divisional Meeting of the American Psychiatric Association will be held in New York City, at the Hotel New Yorker, on November 10, 11, and 12, 1961.

In a most unusual program, in which biochemical, physiological, pharmacological, genetic and psychodynamic contributions are integrated, the Program Committee has spared no effort to make this a most outstanding event.

The Program Chairman is Murray Glusman, M.D., whose address is 722 W. 168th Street, New York 32, N. Y.

* * *

Congress on Psychosomatic Obstetrics

The first International Congress on Psychosomatic Obstetrics will be held in Paris from July 8-12, 1962, under the sponsorship of the French Society of Psychosomatic Medicine and Childbirth. The program committee is interested in presenting papers on the psychology and sociology of pregnancy, labor, and delivery. Further inquiries may be directed to Dr. Lee Buxton, Chairman; Dept. of Obstetrics & Gynecology, Yale University School of Medicine, New Haven, Conn., or to Dr. F. W. Goodrich Jr., 342 Montauk Ave., New London, Conn.

* * *

Conference on Congenital Defects

The International Medical Congress announces its First Inter-American Conference on Congenital Defects to be held on January 22-24, 1962 at the Statler Hotel, Los Angeles, California. Featuring participants from the United States, Canada, and Mexico, the program will include papers on Genetic Defects, Structural Defects and Clinical Manifestations of Genetic and Structural Defects. For further information contact Stanley E. Henwood, 120 Broadway, Room 3013, New York 5, N. Y.

The Analytical Psychology Club of New York

A Memorial Meeting to honor the late Dr. C. G. Jung will be held in the New York Academy of Medicine Building, 2 East 103rd St., in New York City, on December 1, at 8:15 p.m.

The meeting is being co-sponsored by the New York Association for Analytical Psychology and the Analytical Psychology Club of New York. For further information please contact Mrs. Henry Beckett, 30 Gansevoort St., New York 14, N. Y.

* * *

International Congress on Hypnosis

The Postgraduate Center for Psychotherapy and The Institute for Research in Hypnosis announce the 1961 International Congress on Hypnosis to be held in New York City on November 18th and 19th, 1961, at the Auditorium of the New York Medical College. The theme of the Congress will be "The Nature of Hypnosis" and one of the major lecturers will be Ainslie Meares, M.D., of Melbourne, Australia, President, International Society for Clinical and Experimental Hypnosis. Attendance will be limited and early registration is required. For further information and registration forms write to The Institute for Research in Hypnosis, 33 East 65th Street, New York 21, New York.

* * *

National Society for Crippled Children and Adults

Five of the nation's leading specialists in cerebral palsy will discuss neuromuscular, brain and therapy problems relating to speech handicaps of the cerebral palsy patient in a unique symposium at the convention of the American Speech and Hearing Association, Nov. 7 in Chicago.

TAPE RECORDINGS OF THE 1961 ACADEMY MEETING

Tapes of the October 1961 Academy meeting are available through the efforts of Dr. Milton Cohen of Lewistown, Pa. The cost per tape is $9.50. A total of five tapes are available, each covering 90 minutes on each side. Tapes 1 and 2 cover the first day sessions; tapes 3 and 4 the second day, and tape 5 the last day of the meeting.

Please make checks payable to the Academy of Psychosomatic Medicine and mail to the Editor at 1921 Newkirk Ave., Brooklyn 26, N. Y.

Abstracted from the Medical Press

SCHOOL PHOBIA IN TEACHERS. K. J. Mansour, Amer. Jour. of Orthopsych., Vol. 31, No. 2, pp. 347-364, 1961.

Separation anxiety termed as school phobia was observed by the author in five teachers. This phobia is considered to represent the childhood need to remain at home with the mother. The patient perceives himself as a defender of the mother and a person victimized by the father. The phobia appears to portray the conflict between the fear of identification and emulation to gain security. Identical conflict was seen in these patients with reference to childbearing. The conflict between the wish for children and the emotional inability to become a mother leads to resolution through substitution by surrogate mothering. The school phobia appeared when the anxiety became stronger than control.

Adam J. Krakowski, M.D.

PSYCHIATROGENIC ILLNESS. A. H. Chapman, Am. J. Psychiat., Vol. 116, pp. 873-877, 1960.

Fortunately, psychoses precipitated or enhanced by psychiatric treatment affect only a small number of persons. Everyone has emotional problems as a consequence of constantly changing interpersonal relationships. The healthy person makes adjustments with a minimum of conflict and psychogenic symptoms.

Exploration of deep-seated childhood experiences or current interpersonal stresses during an interview sometimes precipitates schizophrenia or depressive psychotic episodes. Removal of long-accepted routines may cause extreme anxiety or depression in the obsessive compulsive person.

Hypnosis should be used with caution because psychotic illnesses may result from ego-weakening effects.

Leo Wollman, M.D.

ERGOTAMINE TARTRATE INHALATION: A NEW APPROACH TO THE MANAGEMENT OF RECURRENT VASCULAR HEADACHES. William G. Speed, Am. J. Med. Sciences, September 1960.

A new, convenient method for administration of ergotamine tartrate is described. The apparatus is an aerosol device, already in general use, for delivery of epinephrine and isoproterenol in metered dose in the management of asthmatics. This preparation delivers micronized ergotamine tartrate in a self-propelled aerosol device. Each depression of the valve delivers 0.36 mg. of ergotamine tartrate. When used immediately upon the onset of the headache attack, 91.3 per cent of the migraine group, 84.6 per cent of the histaminic cephalalgia group and 83.2 per cent of the tension-vascular group obtained excellent or good results. Many patients were more consistently relieved of their attacks by oral inhalation than by any other route previously employed for ergotamine. Side effects, predominantly nausea and vomiting, caused only two patients to discontinue the use of the medihaler. Relief was usually obtained within 15 to 30 minutes.

Lester S. Blumenthal, M.D.

THE MORE SEVERE THE ANXIETY . . . THE GREATER THE REACTION TO PAINFUL STIMULI. Beecher, H. K.: J.A.M.A., Vol. 161, p. 1609, Aug. 25, 1956.

The level of anxiety, not the extent of the wound, determines how much pain a patient feels, according to Dr. Beecher. For example, a soldier injured on the battlefield may feel relatively little pain, since in his case, desperate anxiety—fear of death—has been replaced by the far lesser worry of a wound. On the other hand, the amount of pain reported following major surgical procedures in civilian life is much greater; this is correlated with the fact that surgery here is generally viewed as a disaster, and is fraught with anxiety.

Melvin Land, D.D.S.

COMPLICATIONS OF PHENOTHIAZINE TRANQUILIZERS: OCULAR SIDE EFFECTS. Leonard Apt, M.D., Survey of Ophth., Vol. 5, pp. 550-555, 1960.

Extrapyramidal reactions occur more frequently and more acutely in children than in adults. Apt reports the case of a 9-year-old boy with toxoplasmic uveitis who, because of an adverse emotional reaction to his hospitalization and because of nausea following the use of spiramycin, and because of depressed, and uncooperative behavior, was placed on prochlorperazine (Compazine) for a period of five months. The prochlorperazine dose ranged from 10 to 20 mg. per day orally and resulted in improvement in the behavior disorder.

During the most recent admission, the child developed more acute emotional disturbances which were characterized by refusal to take any medication and by general inaccessibility. The resident physician ordered Compazine intramuscularly, 10 mg. to be given twice daily. This medication was continued for two days. Within 12 hours after the last dose, the patient experienced various periods of drowsiness, restlessness, intermittent attacks of opisthotonus, torticollis

with head turned to the left, spasm of the muscles about the mouth with the mouth drawn to the right, trismus, dysphagia, excessive body movements, carpopedal spasm, dystonic movements of the upper extremities, oculogyric crisis and cyanosis, but no loss of consciousness. A hypnotic dose of paraldehyde was prescribed by rectal administration and twelve hours later there were no abnormal neurologic signs present.

Apparently neurologic side effects of phenothiazine therapy may vary from mild loss of skilled muscle movements to actual parkinsonism-like activity. In this category might be placed oculogyric crises.

To date, neuromuscular reactions have been known to occur with 10 of the 15 phenothiazine tranquilizers on the market. This syndrome is characterized by sudden and recurrent attacks of muscular spasm which may involve any of the skeletal muscle groups and last a few seconds or several hours. Oculogyric crisis is seen with spasms of the ocular muscles, either as an isolated manifestation of phenothiazine toxicity or associated with spasms of other muscle groups.

The extrapyramidal motor symptoms are not necessarily a consequence of excessive dosage of the phenothiazine drug, but may appear after one or several days of normal dosage. However, the signs of extrapyramidal hyperactivity may occur in a patient who has been receiving the phenothiazine drug without adverse effects, following the sudden increase of the dosage over the previously prescribed amount. While thioridazine (Mellaril), has not induced any extrapyramidal signs, it has resulted in blurred vision, transient cycloplegia and iridoplegia, and pigmentary degeneration of the retina similar to that seen with NP 207.

On occasion, patients receiving relatively high doses of the phenothiazine tranquilizers have complained of decreased vision. On reduction or cessation of the therapy, this symptom has been eliminated.

Johnson observed the case of a 16-year-old boy who developed parkinsonian symptoms after several days of perphenazine (Trilafon) therapy, followed by sudden blindness in two days. The ophthalmoscopic examination was negative. The neurologic symptoms and the blindness disappeared one day after the withdrawal of the drug therapy.

T. F. Schlaegel, Jr., M.D.

THE PSYCHIATRIC EMERGENCY. J. Thomas Ungerleider, M.D., Arch. Gen. Psychiat., Vol. 3: pp. 593-601, Dec. 1960.

This article reviews the Psychiatric Emergency Consultation Service at a university hospital for a period of six months. Three hundred and seventy-eight psychiatric emergencies were seen during this time. Forty per cent were diagnosed as neuroses, 20% as psychoses, 17% as character disorders, 10% as acute brain syndromes, 7% as chronic brain syndromes, and 3% as situational reactions. The remaining 3% were medical diagnoses. The distribution cited is for the primary diagnosis made for each emergency.

James L. McCartney, M.D.

SOME PSYCHOPHYSICAL ASPECTS OF MENTAL ILLNESS IN CHILDREN. Pearl H. Berkowitz, Genetic Psychology Monographs, Vol. 63, First Half, February 1961, pp. 103-149.

This study is based on the concept that functional psychosis in children—childhood schizophrenia—is a reflection of an underlying disorder in the maturational process. The author recalls that according to Lauretta Bender this disorder is a biological phenomenon determined before birth by hereditary factors and activated by some physiological crisis, such as puberty, severe illness, or birth itself.

The author investigated certain psychophysical aspects of mental illness in children to determine whether differences in performance can be related to psychiatric diagnosis. Four such aspects were selected for investigation: (1) motor activity, (2) visual perception, (3) memory functions, (4) lateral dominance.

The subjects were 64 children between eight and twelve years of age divided into two groups, psychotic and non-psychotic, on the basis of careful diagnosis. The tasks selected as test items evolved from observed difficulties in the everyday functioning of the psychotic child, previously subjected to a pilot study. The tests were administered in two one-hour sessions soon after the child's admission to the hospital. To measure motor performance, four tasks were used, involving pegboard, needle threading, metronome tapping, and tracing geometric figures. For visual perception, the Bender-Gestalt, the Gestalt Completion, the Figure-Ground, and an "ambiguous letter" tests were used. To evaluate memory, four tasks were selected from the Wechsler Memory Scale; these comprised information, digit and visual memory, and associate learning. The lateral dominance test scored 53 separate items of behavior with the use of hands, arms, fingers, and eyes. The chi square technique was used to establish the significance of group differences in terms of distribution.

Comparison of findings of the two groups shows an overall pattern of retardation for the psychotic group in each of the four areas examined. The most significant difference was in the motor performance. In perceptual function-

ing three of the tasks revealed significant differences, while the ambiguous letter presented an exception. For the psychotic group, memory impairment appeared characteristic, particularly in information and visual retention. As for dominance, preferred laterality was less well established in the psychotic group; in additon, confused or mixed laterality both among the areas and within each task, appeared somewhat greater for the psychotic children. The author suggests special methodology for academic remediation based on findings which characterize psychotic functioning.

Elizabeth Thoma, Ph.D.

CHLORPROMAZINE JAUNDICE: STATISTICAL-CLINICAL STUDY. H. Brill and R. E. Patton, A.M.A. Archives of Neurology, Vol. 3, p. 459, Oct. 1960.

Fifty-six cases of 8,497 state hospital patients and state school patients of the New York State Department of Mental Hygiene, developed chlorpromazine-induced jaundice. The over-all rate was 6.2/1000, an incidence of 0.62%. More than 90% of the cases developed within the first sixty days of treatment. The rate of jaundice for women was double that for men, 0.76% and 0.36% respectively. Three deaths occurred, all in women, all part of other complications. This report is part of the comprehensive studies of chlorpromazine being carried out by the New York State Hospital system. The authors raise the question whether there is any relation between the psychiatric and hepatic effect of chlorpromazine.

Theodore Rothman, M.D.

THE CURRENT STATUS OF SECONDARY PREVENTION IN CHILD PSYCHIATRY. L. Eisenberg and E. M. Gruenberg, Amer. J. Orthopsych., Vol. 31, pp. 355-367, 1961.

Acknowledging that mental illness constitutes a major roadblock to public health, the authors stress the necessity of development of primary, secondary and tertiary prevention. They discuss and propose methods of secondary prevention of several groups of mental disorders of childhood. In discussing disorders for which there is convincing evidence that treatment is effective" they list methods of detection and treatment of toxic psychoses including lead, atropine, benzedrine intoxications; iatrogenically produced psychoses e.g. due to ACTH and bromides; and toxic, infectious and metabolic brain syndromes. Several metabolic disturbances leading to mental deficiency are explored including galactosemia, cretinism and phenylketonuric oliogophrenia. Psychogenic disorders are reviewed as to their causation and prevention with relation to environmental deprivation.

The second group consists of "disorders for which there is reasonable likelihood of response to treatment," such as childhood neurosis and personality disturbances. Although the authors do not decisively express their own point of view, they quote a large number of references and conclude with the suggestion for diagnostic consultation and brief psychotherapy. The response to treatment is uncertain, according to the authors, in functional psychoses of childhood, the clinical syndrome of reading disability in a subclinically brain affected child, and children with chronic brain syndromes.

The authors make suggestions for "control programs" stressing the fact that secondary prevention is a part of total medical care. They suggest improvement of economic, social and educational conditions. An improved methodology of case finding could be achieved by abandoning the traditional methods of agency work and substituting energetic, coordinated community services. They further advocate amplification of existing resources, creating mental health facilities when there are none and enlarging the existing ones; changing the policy of treatment in the Child Guidance Clinic with acceptance for treatment of the brain damaged and the defective child in preference to the neurotic, and those children whose parents show uncooperative behavior; finally, substitution of long by a short term therapy in order to extend the consultation service and increase the clinic's effectiveness.

Adam J. Krakowski, M.D.

EXPERIENCES WITH FREQUENT USE OF HYPNOSIS IN A GENERAL SURGICAL PRACTICE. E. W. Werbel, W.J.S.O.G., Vol. 68: pp. 190-191, May-June 1960.

Dr. Werbel, writing to attract surgeon-interest in the revived modality of medical hypnosis, shows how his experiences in surgical practice vindicate his faith in the efficacy of the post-hypnotic suggestion for the relief of post-operative pain. He chose eleven hemorrhoidectomies to compare, on a subjective and objective basis, with a similar number of hemorrhoidectomies performed without the use of posthypnotic suggestion. The absence or minimal amount of pain with the first post-operative bowel movement in all the cases using posthypnotic suggestion was reported. Additional reports of the value of medical hypnosis for rapid weight loss before operation, and for simple repairs of lacerations in children are presented.

Leo Wollman, M.D.

TEACHING OF EVERYDAY PSYCHIATRY. A Series of Eight Weekly Articles. Lancet, July 1, 1961 through August 19, 1961.

This series of articles is quite refreshing to those of us who realize that our field of medical knowledge is incomplete without the inclusion of more psychiatry in the medical school curriculum. Dr. E. Stengel, Professor of Psychiatry at the University of Sheffield, England, states it well when he says that the teaching of psychiatry has become one of the most urgent problems of medical education.

His plan, the Sheffield Plan, consists of two basic principles: 1) There should be a preclinical course in psychology side by side with anatomy and physiology, with special consideration of those aspects which are relevant to the medical student. Such a course will provide basic knowledge essential for the study of abnormal behavior. 2) The ubiquity of psychological and psychiatric problems in all fields of medical work is to be brought home to the student, by the psychiatrist, throughout the clinical part of the curriculum. While he admits to the shortcomings of the course offered, he hopes they will soon be remedied.

The first article of the eight is titled "Teaching Psychiatry to Undergraduates." The authors are well aware of the fact that most medical students have no real concept of the size or difficulty of the psychiatric problems they will face in practice. Their study, conducted through a questionnaire at the Westminster Hospital of London, shows that the students felt the need for more integration in the teaching of psychiatric and somatic medicine. Especially requested were: a) more work with in-patients, b) opportunities to see and perform psychotherapy, and c) further teaching in child psychiatry.

Drs. John Romano and Michael Kehoe of the University of Rochester, New York, in the second and third articles, describe the Rochester Plan for teaching psychiatry to medical students. Dr. Romano again emphasizes that a major reorientation is taking place in medical education—that we are seeking the beginnings of systematic approaches to man's mind, his emotions, and his relations with others. His hope is that we should not be discouraged by the early fumbling and confusion.

The next article, titled "History Taking in the Light of Knowledge of Unconscious Mental Processes." presents two patients with psychosomatic illness (cystitis and asthma). It illustrates very convincingly what can emerge when a patient is encouraged to express himself. The author, John Klauber, of the London Institute of Psychoanalysis, believes that in spite of the prevalence of neurosis, it is still exceptional for the student to receive any training at all in elucidating the meaning of symptoms.

In the fifth presentation, the reader attends a seminar with a group of general practitioners and their psychiatrist leader. The feelings of the attending physician in the case of the death of a premature baby are discussed by the group. This is the type of teaching so well described by Balint in "The Doctor, His Patient, and the Illness."

A description of the method of teaching by tape is given in the sixth article. The author notes the advantages: there is no danger of disrupting the therapeutic relationship by the presence of students; large numbers of students can participate; the tape can be interrupted at will to stress a point; irrelevant matter can be removed; and many hours of consultation can be condensed to make for a more interesting and informative presentation. He believes this method has great potentialities.

The seventh article presents the methods of examination of students in psychiatry at the Universities of Glasgow and Edinburgh. The objection that examinations do not measure the students' ability to form good psychotherapeutic relationships with their patients can be directed at all examinations in psychiatry. Yet the findings suggest that the results of teaching are better where the student has the professional examination as the incentive.

The last article describes the Sheffield Plan and emphasizes the need for further improvement in teaching of everyday psychiatry.

Howard M. Klopf, M.D.

TOXIC AMBLYOPIA CAUSED BY PHENIPRAZINE HYDROCHLORIDE (JB-516, CATRON). C. W. Jones III, M.D., Bethesda, Md., Arch. of Ophthal., Vol. 66, pp. 29-36, July 1961.

Some of the patients receiving this monoamine oxidase inhibitor and hydrazine derivative have developed color blindness and decreased visual acuity which improved spontaneously when the drug was discontinued. In one case which was autopsied, bilateral optic tract lesions were demonstrated.

The previously reported side-effects of pheniprazine hydrochloride include: periorbital and dependent edema, liver toxicity, mild constipation, delayed micturition, impotence, pruritus, gastritis, anemia, flaccidity, paresthesias, neuralgia, hyper-reflexia, and insomnia. Wright described blurring of vision in two patients receiving pheniprazine hydrochloride and one of these patients described a green scotoma. Gillespie reported six patients receiving pheniprazine hydrochloride who developed blurring of vision and red-green color sense defects.

It is suggested that patients be screened with the Hardy - Rand - Rittler Pseudoisochromatic Plates, since defects in color vision were always apparent in the early stages of the toxicity. In all but two patients the visual symptoms improved considerably after the drug was discontinued. The optic toxicity appears to be related to the dose level of pheniprazine hydrochloride rather than to the total dose. The fact that one patient developed permanent reduction of vision, central scotomata, temporal pallor of the disks, and color blindness, and that optic tract lesions were demonstrated pathologically in another patient, suggests that the symptoms of blurred vision and disturbed color discrimination noted in the other patients were caused by optic tract lesions.

T. F. Schlaegel, Jr., M.D.

SOME RECENT STUDIES OF CONFLICT BEHAVIOR AND DRUGS. Neal E. Miller, American Psychologist, Vol. 16, pp. 12-24, Jan. 1961.

The author reports some of the findings from on-going experiments to determine how certain drugs act to produce their effects. His earlier clinical studies showed that practically all the common symptoms of neuroses, and even psychoses, can be produced by fear and conflict.

Ten years ago he and Dollard advanced the hypothesis that the therapeutic effects of sodium amytal are produced by reducing the avoidance component of an approach-avoidance conflict more than the approach one. The current studies do not support the earlier conclusions. They do, however, suggest that resistance to stressful situations can be learned, and that methods are at hand for analyzing at both the animal and human level the laws governing resistance to pain, fear, fatigue, frustration, noise, nausea, and extremes of temperature. Moreover, these experiments clearly show it is unsafe to assume that therapeutic transfer will occur from the drugged to the normal state; in this respect chlorpromazine yielded more promising results than sodium amytal. Similarly, it was found unreliable to assume that the drug which produces the greatest effect on immediate performance will have the greatest ultimate effect on learning transferred to the normal state.

Findings from these experiments also lead to speculation as to whether fear is allayed or consolidated by the passage of time. Tentative conclusions based on work with animals indicates that fear not immediately resolved tends to be consolidated; the crucial factor, however, seems to be the extent to which the elapsed time changes or restores the cues present immediately preceding the traumatic experience.

Elizabeth Thoma, Ph.D.

CEREBELLAR SYNDROME IN MYXEDEMA. E. H. Jellinek and R. E. Kelly, Lancet, Vol. 2: No. 7144: 225-227, 1960.

The authors describe a series of six patients with myxedema, all of whom presented with varying degrees of cerebellar symptomatology. In five of the patients who were treated with thyroid, there was a prompt remission of the cerebellar signs.

AN ANALYSIS OF THE VERBAL CONTENTS OF SUICIDE NOTES. L. A. Gottschalk and G. C. Gleser, Brit. J. Psychol., Vol. 33, No. 3: 195-204, 1960.

Genuine suicide notes differ in their verbal content from false suicide notes; their unique characteristic appears to be a telegraphic effort to communicate with a significant love object. The choice of words reveals an unusual preoccupation with objects of the live world—a wish to maintain some tie with or produce some persistent effect on such objects.

ABUSE OF ALCOHOL AND ORGANIC BRAIN DAMAGE. O. Bratfos and E. Sagedel, Nord. Med., Vol. 65:139, Feb. 2, 1961. (Abstracted J.A.M.A., Vol. 176, No. 5, May 6, 1961.)

The authors found that brain lesions resulting from chronic alcoholism include chronic subdural hematoma, degeneration of the corpus callosum (Marchiafava-Bignami syndrome), alcoholic pseudo tabes, alcoholic amblyopia, Korsakoff's syndrome, and acute hemorrhagic polioencephalitis (Wernicke's syndrome). In a study of 19 patients, four had delirium, three had Korsakoff's syndrome, three had dementia and nine had psychopathic symptomatology.

WERNICKE'S ENCEPHALOPATHY. H. Cravioto, J. Korein and J. Silberman, Arch. Neurol., Vol. 4, p. 510, May 1961.

The authors report on 28 cases reviewed at postmortem. Changes were located in the mammillary bodies in all cases, and less often in the periaqueductal gray matter. Major changes included vascular hyperplasia, fresh hemorrhages, degeneration of the myelin sheath, and moderate astrocytosis. There was a relative preservation of the neurones. Severe astrocytosis was also noted in the thalamus. The primary defect in Wernicke's encephalopathy is an altered thiamine metabolism. The most common clinical findings included, in the order of frequency, alcoholism, organic mental syndrome, hypotension, decreased deep reflexes, lethargy, delirium tremens and abnormal extraocular movements.

ULCERATIVE COLITIS. George L. Engel, M.D., Gastroenterology, Vol. 40, No. 2, pp. 313-317.

The author, trained as an internist, psychiatrist and psychoanalyst, has studied fifty patients with ulcerative colitis for over ten years. He notes that patients with the disease show certain psychological features which are not necessarily pathognomonic. The disease usually becomes manifest when the patient feels hopeless or helpless; re-establishment of the threatened lost relationship is usually associated with remission—except in patients with chronic and relatively irreversible changes in the bowel.

The author feels that the persistence of feelings of loss and helplessness or hopelessness reduces the efficacy of ACTH or adrenal steroids. He also postulates a "primary biologic factor" (possibly an error of metabolism) which is either genetic or acquired during fetal or early life.

CONTEMPORARY CONVERSION REACTIONS. F. J. Ziegler, J. B. Imboden and E. Meyer, Amer. J. Psychiat., Vol. 116, No. 10, pp. 901-910, 1960.

The authors analyze 134 consecutive patients diagnosed as conversion reactions. The clinical aspects include classical loss of function, simulation of organic disease, patterns in which bodily pain predominates, and situations in which conversion symptoms are intermingled with those of organic or psychophysiologic disease. In 40 of these patients, depression was clinically evident; 19 showed symptoms of incipient schizophrenia.

The authors conclude that conversion reactions may serve to reduce or avoid depression, neurotic anxiety, or psychotic disorganization. The term "histrionic" personality is preferred to "hysterical" because of the tendencies to transparent dramatization.

DEPRESSION. William Furst, M.D., Diseases of the Nerv. Syst., Vol. 22, No. 3, pp. 157-160.

Severe endogenous depression is a biologic constitutional, somatic disease. Unlike the situational or exogenous type, it is a medical emergency. In 500 ambulatory patients the author found that drug therapy approaches the effectiveness of ECT. In many cases it may be the treatment of choice. With the use of phenelzine, complete remission was obtained in up to 80%. Side effects were rare. Results with ECT ranged from 80-90%, with more rapid effects, but with some undesirable features. Most important is that the patient treated with a drug participates in his recovery; in treatment with ECT, the patient remains physically and emotionally inactive.

STUDIES IN MYASTHENIA GRAVIS. K. E. Osserman and G. Genkins, N. Y. State J. of Medicine, Vol. 61, No. 12, pp. 2076-2085, June 15, 1961.

The onset is usually accompanied by ocular symptoms such as diplopia or ptosis, unilaterally or bilaterally, mimicking various intracranial lesions. Changing from one side to the other is fairly characteristic of myasthenia gravis. Muscle atrophy is part of the picture; usually, at the beginning, the patient feels better in the morning and manifests weakness of the proximal portion of a limb with usage. Physical or emotional stress can accentuate the weakness. Cholinergic drugs (Tensilon or Prostigmin) may clarify the diagnosis. Roentgenographic studies of the chest should be done to pick up a possible enlargement of the thymus gland. EKG examination may reveal non-specific changes in the S-T and T wave segments. Hyperthyroidism or hypothyroidism may be co-existent, but overactivity of the thyroid gland is more frequent.

On occasion, the recommended dosage of Tensilon may increase the symptoms. Myasthenia gravis may present as a mild dysphagia, simulating globus hystericus. Skeletal muscle weakness, coupled with atrophy, and deep muscle pain should serve as alerting signs. Electromyography may aid in the diagnosis if variability in the size of a single motor unit action potential on voluntary contraction is elicited, or if repetitive stimulation produces a gradual decrease in amplitude. The production of these electromyographic changes by the administration of d-tubocurarine, or their removal by anticholinesterase drugs can be helpful.

The patient with myasthenia gravis is extremely sensitive to d-tubocurarine, so that this test is not without danger. The use of decamethonium iodide, a depolarizing neuromuscular blocking agent, is safer than curare which is nondepolarizing. It will usually produce no clinical or electromyographic changes in the myasthenia patient but will produce changes in normals. If clinical weakness does occur, Tensilon intravenously produces immediate improvement; but in normals, further weakness is produced.

As for the value of thymectomy, it is usually reserved for younger patients who have had myasthenia for less than 2-5 years. Oxime drugs are the most valuable for the treatment of cholinergic crisis precipitated by the use of drugs.

The main theories as to the etiology of myasthenia are 1) diminished acetyl-choline production, 2) increased cholinesterase production and 3) alteration of the end-plate properties. There is some suggestion of the presence of a circulating curare-like substance in myasthenia sera.

W.D.

Book Reviews

SOVIET PSYCHOLOGY. A Symposium. Translated by Ralph B. Winn. New York, Philosophical Library, 1961. 109 pages.

This book, in spite of its modest format, aroused the reviewer's interest because he felt truly like being in a foreign field or even country. According to information contained on its cover, it represents a symposium in which prominent Soviet educators "attempted to define the principles of the dominant schools of Soviet psychology and the theories underlying their educational prgrams." Were it not for the protective cover, one would not know that Professor Ralph B. Winn, the Chairman of the Department of Psychology at Monmouth College in New Jersey, who wrote a foreword to the book, is also responsible for its translation. Last, but not least, one is unable to determine in the book or elsewhere the source, date and occasion of the symposium.

First of all, the title "Soviet Psychology" seems to be misleading. In his foreword Professor Winn acknowledges this license with the word "psychology" by stating that "the material is, to be sure, confined to one aspect of the problem, namely to the function of psychology in the growth and learning of children, particularly while they attend school." Therefore, a title more descriptive of its content should be "Elementary Education Policy in the Soviet Union." Since this reviewer is unfamiliar with the names of the contributors, he feels unable to ascertain how representative the material must be considered.

However, if one follows the book flap's claim of representative prominence for these authorities, the little volume provides a quick overview of current Soviet policy and philosophy. It contains an illuminating discussion on the mental development of children as seen by Leontiev, primarily because of its descriptive encouragements and admonishments to parents as, for example, in prescribing the "do's and don't's" of assisting children in doing their homework.

It remains open to question whether this is a scholarly and scientific discussion, since the presentations appear to be pointed toward a more popular audience of readers, with free-wheeling sideswipes at "bourgeois fatalistic psychology" and such "contemporary" bourgeois psychologists as Binet, Stern, Claparede, Preyer, K. Buhler, Thorndike, Watson and others. It also may be for dialectical reasons that the authors persist in beating the dead horse of "heredity versus environment' as American psychologists and educators used to argue it some 20 or 30 years ago.

Principally by virtue of one's own ignorance, it is difficult to arrive at an answer about the text's general validity. It should be of interest to educators at large, which naturally also would include the teachers of medicine. One wishes that the publishers could have been less cryptic in revealing the frame of reference in which the discussion took place.

Klaus W. Berblinger, M.D.

THE RIGGS STORY. The Development of the Austen Riggs Center for the Study and Treatment of the Neuroses. Lawrence S. Kubie, M.D. New York: Paul B. Hoeber, Inc., Medical Division of Harper & Brothers, 1960. 185 pages.

This small book is made up of ten chapters, five appendixes, and a center piece of several illustrations. It is an interesting description of one of the psychiatric figures of our time, but it is more a factual account than a convincing story. It is evident that Austen Riggs had some definite ideas of his own, and that he attempted to set up a school of thought unique to himself. After his death in 1940, there was a period of quiescence, and then the Austen Riggs Foundation was revived and has been making itself felt in the last few years.

The available data on Dr. Riggs' attitude towards Freud have many contradictions. In his early years, his writings would indicate that he was rebellious and defiant to Freud's ideas and many times denounced him angrily. This was evident in 1929 when this reviewer was invited to join the organization, but because of analytic inclinations decided against such an affiliation. As stated in this book, Dr. Riggs took "an irrevocable stand against the far-flung swings toward Freudianism," and he was "left cold by much of the fantastic, bizarre mental gymnastics developed by Freud."

There was no doubt that Dr. Riggs was a questionable influence on the advance of modern psychiatry, and his followers have continued to perpetuate his methods and have continued to study his ideas about neuroses. The work of the Austen Riggs Foundation was centered primarily on neurotic personalities, and on page 42, it is pointed out that "Dr. Riggs turned to the psychiatry of the neuroses because the ubiquitous influence of the neurotic process had impressed him deeply, first during his brief experience as a surgical house officer in the Presbyterian Hospital, and then as a young internist in the busy office of an outstanding New York internist. When Dr. Riggs went to the Berkshires in 1907 to cure his own tuberculosis, his inner emotional experiences and the self-observations which these had occasioned, intensified his awareness

of the importance of the neuroses in all of medicine.

"Furthermore, his personal experience with tuberculosis continued to exercise an influence on his thinking throughout his life, if only because he frequently had to face the possibility of recurrence. Many episodes of hemoptysis reminded him of the body's vulnerability, and of the incessant interplay between organic and psychologic processes. Even towards the end of his life, when metastases from his cancer of the prostate were bringing death near, a recurrent hemoptysis caused diagnostic confusion. Thus physiologic and psychologic experiences linked his end to his beginning, when the development of his personality after his seventh year was influenced by his father's death after a long struggle with pulmonary tuberculosis."

The appendices list the writings of Austen Riggs, as well as those associated with him. This book is of prime interest to those who have been, or are associated with the Austen Riggs Foundation.

James L. McCartney, M.D.

FUNCTIONAL NEURO-ANATOMY. A. R. Buchanan, M.D. Lea & Febiger, Phila., 1961. Pp. 377. $8.50.

In this fourth edition of "Functional Neuro-Anatomy," the author's "policy of presenting essential material in the least number of pages" is indeed striking. Another departure from the more conventional approaches is reflected in the material being less concerned with the anatomy of the various "levels" than with putting these various levels together and intertwining them with physiological and clinical facts.

Its twenty-nine chapters, replete with excellent drawings and plates, are short and succinct, yet remain packed with basic neuroanatomical facts and correlations. The contents include chapters dealing with the divisions of the nervous system, development and histogenesis, receptors and methods of testing sensibility, the spinal cord, sensory pathways, the special senses, the internal capsule, the cerebrum, cyto-architecture of the parietal, temporal and occipital lobes, the motor cortex, the lower motor neurons, extrapyramidal pathways, lesions of the motor pathways, the cerebellum, cerebellar dysfunction, the autonomic nervous system, the basal ganglia, the diencephalon, the rhinencephalon, the ventricles of the brain, the cerebrospinal fluid and the blood supply of the central nervous system.

An excellent series of plates, illustrating no less than thirty-two cuts through the brain stem at different levels, is a highly satisfactory attempt to provide a greater understanding of the anatomical facts.

This book will be of value to those physicians who desire a comprehensive review of neuroanatomy in the framework of its application to clinical neurology. It is "functional neuroanatomy" at its very best.

W.D.

THE SELF CONCEPT. (A Critical Review of Pertinent Research Literature.) Ruth C. Wylie. Univ. of Nebraska Press, Lincoln, Nebraska, 1961. 324 pages.

The purpose of this book is to review critically the recent research literature in the area of "self psychology." In the present review, major emphasis is given to studies which pertain to the conscious-self concept, sometimes called the phenomenal self. Attention is also given to investigations concerned with nonphenomenal constructs, the unconscious-self concept.

The bewildering array of hypotheses, measuring instruments and research designs used and described in the literature prompted the author to analyze the requirements for adequate measurement and research and to suggest what is needed in future research.

In reviewing this book, one gets the feeling that no single theory of the self concept has received complete exploration. "There is a good deal of ambiguity in the results, considerable contradiction among the findings of various studies, and a tendency for different methods to produce different results. In short, the total accumulation of substantive findings is disappointing."

A suggestion was made to abandon the self concept theories unless they can be more precisely formulated. To improve their predictability it has been suggested to add the unconscious-self concept. "However, there is as yet no proof that one can predict behavior as well, let alone better, with unconscious-self concept measures than with conscious-self concept measures."

The author points out that empirical evidence supporting the theories of personality is limited by four factors: (1) lack of proper scientific characteristics of the theories themselves; (2) difficulties in formulating relevant, controlled research in a new idea; (3) individual research in a new area is not part of a planned program and cannot be easily synthesized; (4) avoidable methodological flaws.

Morison (1960) is quoted by the author as summing up her feelings: "Although interpreting the facts thoughtfully and going beyond them are the most important things, gradualness, drudgery, and patience are the price of attaining those significant increments in factual knowledge from which valid psychological laws may be formed."

There is an excellent bibliography and index. Ruth C. Wylie has done an excellent job with this difficult material.

Joseph Joel Friedman, M.D.

HYPNOSIS IN SKIN AND ALLERGIC DISEASES. Michael J. Scott. Springfield, Ill.: Charles C Thomas, 1960. 161 pages. $6.50.

This is the first textbook devoted exclusively to the clinical use of hypnosis in treating dermatological conditions. Its concise form, the use of illustrations to clearly demonstrate the techniques of induction, and the deepening procedures used in hypnotherapy, are good reasons for this book to be studied by the dermatologist, allergist or the general practitioner interested in psychosomatic medicine.

In the foreword, the author explains his reasons for linking dermatology and allergy. He also correctly states, "It is erroneous to consider any somatic disorder purely somatic, nor any psychic condition totally psychic. Soma and psyche are interreactive units so integrated that no somatic change can occur without a reflex reaction on the emotions or psyche; conversely, no psychic change can occur without some resultant effect on the body." There is a definite trend in dermatology and allergy toward a psychosomatic approach in treatment when indicated. Hypnotherapy affords more rapid benefits than any other form of treatment, but a knowledge of human psychodynamics is essential. A note of warning is issued to confine the use of hypnotherapy to the effective competency of the individual medical practitioner. This is fair and proper. The limitations on the part of the patients with regard to their acceptance of this modality are also noted.

Historical introduction of hypnosis first as an art, then as a more experimentally developed science, is presented in an interesting manner. Hypnotic phenomena, theories, techniques and their applications to dermatology and to allergy are other chapters which entice the reader. The future of hypnosis and the psychosomatic approach in the author's selected field of specialty is discussed without the over zealous enthusiasm which one characteristically notes in the tyro hypnotherapist. This is a refreshing sign.

Case histories illustrating the successful utilization of hypnotherapy in skin and allergic diseases provide a chapter of interesting reading. The cases include herpes simplex, verruca vulgaris, acne rosacea, atopic dermatitis, post herpetic neuralgia, asthma, and neurotic excoriations.

Dr. Scott's book should have a place in the library of every physician using or planning to use hypnosis to treat skin and allergic diseases.

Leo Wollman, M.D.

CURRENT PSYCHIATRIC THERAPIES. Edited by Jules Masserman, M.D. Grune & Stratton, New York, 1961, pp. 246.

This volume is a compilation of special contributions from experts in therapeutic subspecialties. Selected authorities in psychoanalysis, brief psychotherapy, hypnotherapy, existentialist and related schools, group therapy, psychopharmacology, etc., were asked to prepare annual summaries of current advances; in addition, condensations of the best papers given at various professional meetings were utilized.

The list of forty contributors and the diversity of topics chosen attest to the scope and depth of this unusual attempt to communicate the very best as well as the most current therapies.

The topics include: preventive psychiatry; the child and adolescent; psychophysical methods; psychoanalysis; couples and groups; the clinic, institution and community; aftercare programs and an excellent review and integration by Dr. Jules Masserman.

Of especial interest to the readers of *Psychosomatics* are the articles dealing with campus psychiatry, suicide prevention, alternatives to hospitalization, the management of acute conversion reactions (where rapid symptomatic relief is the goal rather than long-term psychoanalytic exploration), psychopharmacology (with a wholesome attempt at methods of evaluation of clinical studies and an inclusive compendium of current drugs), drugs and psychotherapy (uses and abuses), psychoanalysis and medical education (the problems of integration), psychoanalysis and psychiatric practice (the modifications in classical technique and the changing concepts of the therapist's role), and the final article on "Anxiety and the Art of Healing."

This book, with its wealth of material and interdisciplinary approach, should prove to be of value to all readers interested in recent advances in psychiatric therapy.

W.D.

THE DARK URGE. Ludwig Eidelberg, M.D. Pyramid Books, N. Y., Paperback, pp. 159, 50 cents.

Dr. Eidelberg, by virtue of temperament, training and experience in both the practice and the teaching of psychoanalysis, is exceptionally qualified to discuss the "dark urge" to rape and be raped.

This book is written with a humorous charm given only to the gifted. Its thesis broadens the concept of rape to include "all acts in which an

instinctual discharge" is forced upon a victim. Sex and aggression are exposed to a penetrating examination with the use of ten interesting clinical examples which support the author's careful conclusions.

Although replete with homespun analogies employed to simplify and to clarify, the style does no damage to scientific validity. If anything, the author demonstrates that popular writings on psychoanalysis, while not of therapeutic benefit, can be educationally useful. Read carefully, this book provides the psychodynamics of aggressive sexuality; the general principles and goals of therapy are presented meaningfully. Passing reference is made to mythology, religion and anthropology as they apply to the struggles of man to reach that level of civilization in which sexual union becomes an act of love.

This book is readable, practical and informative. It is highly recommended to all physicians and to all others whose interests embrace human behavior; to all who seek and inquire into the deeper motivational factors which cause aggression to spill over into sexual activity.

George J. Train, M.D.

PREVENTION OF MENTAL DISORDERS IN CHILDREN—INITIAL EXPLORATIONS. Edited by Gerald Caplan. New York: Basic Books, Inc., 1961, pp. 425. $8.50.

Two of the eighteen chapters of this volume were written by the editor; the others represent sixteen papers by twenty-one oustanding workers in the fields of child psychiatry, neurology, psychology, education, mental health, and pediatrics. These were presented at the February 1960 conference in preparation for the Fourth International Congress of Child Psychiatry to be held in 1962 in Holland.

The basic assumption, supported by experience, is that the disturbed mother-child relationship is the cause of emotional disorders in children; it may exist in combination with other causative factors, either exogenous or endogenous or both. While the first problem has been studied extensively, the approach to the latter is still inconclusive and empirical because the noxious stimuli are not well known.

Sixteen chapters of the book are divided into four groups dealing with the studies of (a) organic causative factors, (b) psycho-social factors involved in interpersonal family relationships, (c) psycho-social factors related to "situational and maturational crises in the development of personality in children," and (d) "socio-psychologic implications of the school setting for the promotion of mental health." Each article also discusses appropriate preventive suggestions.

The first group presents the following:

1. A discussion of problems of mental deficiency which includes organic and genetic factors and incorporates the current concepts of the etiologic genetic research as well as postnatal factors.

2. A methodology of various studies of prenatal etiologic factors leading to neuro-psychiatric sequelae is described as related to social, economic, demographic and maternal factors, including influences of noxious, toxic, and infectious agents.

3. The study of complications of pregnancy and birth suggests the importance of minor birth traumata, more prevalent in the lower socio-economic strata, and shows the relationships between such complications and cerebral palsy, mental deficiency, epilepsy, behavior disorders, and reading disabilities. Possibly some of the factors usually ascribed to maternal deprivation may be actually caused by minimal brain injuries.

4. The final topic of this group deals with the role of the pediatrician in the prevention of mental disorders.

The second group of discussions centers around parental education in the handling of children; the use of much needed counselling and group sessions; and the demonstration of the questionable value of sex education. Intervention with mothers in the management of young children through counselling, the use of well baby clinics, pediatric practice and nursery school, with emphasis on a balance between gratifying and frustrating experiences to effect a healthy development of personality, are topics of another paper. The relationship between emotional disturbances of children and immaturity of their mothers suggests that preventive measures must be taken during pregnancy and early parenthood.

The third group of articles comprises topics of "preventive implications of development in the pre-school years." The strengthening of positive resources for coping with stress as well as reducing dangers of pain, disease, anxiety and deprivation, frustration and loss are proposed. Methods of handling initial developmental problems of childhood and coping with the resolution of such crises are described. Pediatric hospitalization and practice and intervention in the crises caused by birth of a child with a congential anomaly are described. The role of the community mental health center in coping with the individual and family crises is discussed.

The group of papers related to school children describes the interrelationship of the learning processes and personality formation. The role of the school in the development of ego strength is elaborated.

The final chapter discusses primary prevention.

It suggests methods directed towards factors responsible for "distortions of personality development by long-term influences." It also deals with "intervention directed towards the problems of individual children during crises due to situational difficulties." The author also suggests a development of community resources to coordinate the total approach from various fields.

This book, composed of articles of many authors, shows weakness in its subject repetition. Many problems discussed are not new and many studies quoted are not conclusive. This volume points out the fact that the knowledge of mental illness is not complete and that too little is done in utilizing what is known. The very positive value of the book consists of drawing attention to the vast problem and the need for the primary prevention of mental disturbance in children. It is an excellent source of information pertaining to research and is recommended to everyone dealing professionally with children.

Adam J. Krakowski, M.D.

THE MERCK INDEX OF CHEMICALS AND DRUGS. Paul G. Stecher, Editor. Seventh Edition. Merck & Company, Inc., Rahway, New Jersey. Pp. 1642. $12.

This edition covers nearly 10,000 descriptions of individual drugs, more than 3,000 structural formulæ, and about 30,000 names of chemicals and drugs, alphabetically arranged and cross-indexed.

In addition to all this, the book contains a table of international atomic weights and close to 300 pages of material dealing with subjects as diverse as calories in foods, Russian alphabet, coal-tar colors, antifreeze mixtures, etc., etc.

A feature of the main section provides a bibliographic reference for each drug, where possible, and includes toxicity and safety factors.

W.D.

MENTAL DRUGS: CHEMISTRY'S CHALLENGE TO PSYCHOTHERAPY. By O. A. Battista. Philadelphia & New York: Chilton Company. 155 pages. $3.95.

Dr. Battista states in his introduction that "this book will shock many and enrage more than a few."

That it will do so is not an accident. Dr. Battista is an experienced and lucid writer whose style is well adapted to mass media. He has drawn a clear if somewhat oversimplified picture of the role of chemistry in our battle against mental illness. After some introductory comments on the chemistry of bodily function, he turns to the use of hallucinogenic substances and discusses the chemistry of schizophrenia. The remaining chapters concern themselves with the tranquilizers and antidepressants.

The lay reader will find a complicated field made simple by this exposition. However, the medical reader will be angered. Battista belittles psychotherapy and is especially hard on psychoanalysis. One could easily understand the motives of a chemist who praises the contributions of chemistry to the care of the mentally ill. However, one can only wonder about the motives of the author who found it necessary to couple this with an attack on psychotherapy, psychoanalysis and "talk cures."

Laurence B. Weiss, M.D.

PSYCHOANALYTIC CONCEPTS OF DEPRESSION. Myer Mendelson, M.D. Springfield, Ill.: Charles C. Thomas, 1960. 170 pages. $6.50.

In this most informative and readable book, the author presents a critical examination of authoritative contributions to the problem of depression. Not only has he carefully and thoroughly reviewed pertinent literature, but he has organized the material to establish his objective.

He traces these recordings from Kraepelin, who emphasized the clinical and nosological aspects of depression, through Bleuler who sharpened these concepts, to Freud and his followers who introduced and developed genetic-dynamic factors. The writings of Abraham, Rado, Klein, Gero, Bibring, Jacobson and Cohen are scrutinized. The author notes that much of what appears in current literature on depression finds its origin less in the clinic and more in theoretical metapsychologic excursions. Freud and Abraham, for example, took meticulous pains to define the type of depression with which they worked and avoided a generalized application to other forms of depression of the dynamics which evolved in their studies. Later writers tend to gloss over definition and generalize without heed for controls.

Shortcomings and disagreements are uncomfortably evident in the literature on depression. Yet much has been achieved in the dynamic clarification of this complex disease. Scientific evaluation abounds and psychoanalytic hypotheses are being more and more tested in empirical studies.

In addition, the author observes correctly that the subject of depression is much more complex than the early closed system theories would have led one to suspect. Indeed further studies, he concludes, will approach the subject from a wide variety of points of view. The book is most interesting, timely and useful and is recommended reading for all physicians interested in the subject of depression. It is an excellent review for the psychoanalytically oriented psychiatrist. An extensive bibliography and a workable index are included.

George J. Train, M.D.

PATIENTS AND DOCTORS. Kenneth Walker. A Pelican Book. Published in U.S. by Penguin Books, Inc. 182 pages.

"Patients and Doctors" is one of a series of books written especially for Pelican by Kenneth Walker, a consultant surgeon in London. Its aim is to explain to the layman the nature of diseases in general and the principles involved in medical treatment. However, the book is not a Home Medical Advisor in any sense. The author is quite a philosopher and the subject matter often wanders into adjoining territories of science and life. His chapter on Organic Life, for example, contains an excellent description of the origin of life on our planet and the relationship of the individual to all living things.

In the sections on the various types of diseases and the drugs used in their treatment, many references are made to the history of medicine and to the great men in medicine. This, of course, makes for interesting reading.

While the style of the book is light and often amusing, Mr. Walker is concerned with the deterioration of the patient-doctor relationship since the advent of the Health Act in England and especially with the decline in prestige of the very person upon whom the working of that Act depends—the family doctor. He says that since most medical men in the Health Services are greatly overworked, the quickest way to dispose of patients is to give them what they ask for —a bottle of pills or a jar of ointment. No time is spent in listening or giving advice or trying to change bad habits. A good patient-doctor relationship is vital for the most effective diagnosis and treatment, and this he feels is being lost in England.

The author is quite well aware of the psychosomatic aspects of illness. In his chapter, "The Commonest Symptom," he states that he would unhesitatingly say that the symptom most commonly seen in the doctor's office is fear. He then describes very well the effects that worry and anxiety have in producing illness.

This book can well be recommended to our patients.

Howard M. Klopf, M.D.

A PRELUDE TO MEDICAL HISTORY. Felix Marti-Ibanez, M.D. MD Publications, New York, 1961, pp. 253. $5.75.

This book is an inspiring saga of the history of medicine. Packed with details of the past which are skillfully interwoven with present concepts and future potentialities, it reads like a novel. Based on lectures given to medical students, its goal was to imbue students with enthusiasm. The author points out that the "physician" is derived from the Greek physis, meaning nature; "medicus," from mederi, meaning to heal; while "med" means to meditate or think. The word "doctor" originally meant teacher.

The shaman, predecessor of the modern physician, practiced exorcism and made prophecies. The concept of disease was that of a foreign body, coming from without, so that therapy consisted in drawing the evil spirits out of the body. With the advent of Hippocrates, for the first time in history, physicians studied patients—not merely diseases. Diseases, including epilepsy, were no longer considered to be sacred. Plato accepted the unity of body and soul, thus heralding the concepts of psychosomatic medicine. Aristotle restored medicine to the realm of biology, pointing out man's true nature as an animal and not as a mystical entity. Galen reunited medicine and philosophy, which had been separated by Hippocrates.

The Renaissance witnessed Johann Weyers' and Juan Luis Vives' protest against the barbarism inflicted on "witches."

The twentieth century has seen the tremendous growth of psychiatry, a new approach whereby mental diseases may eventually turn out to be basic alterations in the body's biochemistry. The contribution of Freud, in proving that the unconscious, instead of the conscious, constituted the major portion of the mind, was of epochal proportions.

A bibliography on medical history is appended; there is also a list of Nobel prize laureates and lastly a "selective medical and historical chronology" covering the high spots from Imhotep (2980 B.C.) right through to the developments of 1960.

The book is recommended to those who seek a readable, lively account of the panorama of medical history.

W.D.

OUT OF THE DEPTHS. Anton T. Boisen. New York: Harper & Bros., 1960. 210 pages. $4.00.

In his autobiography the author describes five psychotic breakdowns, all characteristic of the catatonic type of schizophrenia. He wrote many letters to his friends during these periods; they saved these letters and from these the author constructed his story. He says of his book, "It has told the story of my life with a minimum of reflection and interpretation." It is a life of repeated frustration, repeated psychotic episodes, and a final sublimation through religion.

The author speaks of his psychotic episodes as "problem-solving experiences" which "left me not worse but better." In addition he describes "five major decisions which have been marked by deviation from the normal." These ten ex-

periences he characterizes as "creative mental activity." He ascribes his trouble to an "automatism," an idea which leaps suddenly into consciousness, coming from a superhuman source, carrying authority because of its source and replacing reason. Such automatisms, the author believes, accompany the important decisions of poets, inventors, scientists, and religious leaders. He interprets an acute schizophrenic episode as a religious experience, an attempt at reorganization of one's being which tends either to make or break the personality.

Joseph Joel Friedman, M.D.

MENTAL HEALTH IN THE UNITED STATES. By Nina Ridenour. Harvard University Press, Cambridge, Mass., 1961, 146 pp. $3.50.

Among the many curious paradoxes of psychiatry is that the psychiatrist often says that his is "a new branch of medicine" despite the fact that psychiatry is actually one of the world's oldest healing arts. Apologists for the specialty imply that it was founded very recently, and therefore has not yet had time to accumulate a body of knowledge and skills. Apparently these apologists think they must try to justify psychiatry's alleged slow progress, or to account for the unaccountable diffidence the psychiatrist sometimes exhibits when he is among peers in the other medical specialties.

Yet, the field is very old indeed. The primitive shaman used psychiatric techniques; the physician of classic Greece used many of its "modern" principles; Christ's teachings contain much psychiatry; Shakespeare's works abound with psychoanalytic expositions; Pinel and Benjamin Rush taught much of the psychiatry that we teach the student of today; the American Psychiatric Association is this country's oldest national medical organization.

Humility, one must allow, is a utilitarian virtue, but one can get strength from pride—pride in those who have gone before. That psychiatry humbly worries about its many unsolved scientific problems and unhelped patients bespeaks the psychiatrist's conscientiousness and his unflinching recognition of the complexity of the most complex of the branches of medicine. Those problems have remained unsolved through the centuries, however, because of their magnitude, and not because of lack of dedication, vigor, perseverance, and hard work among those who have made psychiatric history. But to take pride in one's forbears, one must be told about them. Greater emphasis, therefore, could usefully be placed on giving the young psychiatrist a sense of the remarkable history that lies behind him. Although excellent contributions to this purpose have already been made during the past two decades by such works as Zilboorg's, "A History of Medical Psychology," and Bunker's "One Hundred Years of American Psychiatric Literature," psychiatry needs more of these, and more emphasis on tradition in psychiatric training programs and in psychiatric journals. The APA Committee on the History of Psychiatry has been assigned an important mission for which it deserves much support.

An account of how that tradition has been enriched during our century is Nina Ridenour's recent offering, "Mental Health in the United States." Primarily a history of the National Association for Mental Health (MAMH) and its corporate forerunners, this book nonetheless throws much light on the history of psychiatry, because the efforts of the NAMH have been closely associated with those of psychiatry. Miss Ridenour captures and preserves for future historians some heretofore undocumented personal recollections of outstanding psychiatrists alive today. Most importantly, she brings together, for the first time, information about the origins of significant twentieth century thought in mental health and psychiatry. She clearly shows, furthermore, the relationships among those facts and the pattern they form. Like all other really good histories, happily, this book does not treat its material as a dead *fait accompli*, but rather as beginnings and causes of living problems of today.

By pointing up the blind alleys already explored, Miss Ridenour helps us avoid repeating old errors. She does more than guide us, though; she twits us as well when she points out where society is failing psychiatry and the mentally ill patients, and where psychiatry and the mental health movement, by failing to provide energetic and persevering leadership, have let down society. Her accounts of our predecessors' efforts, aspirations, and successes nonetheless reveal a precedent that today's NAMH and psychiatry will be hard put to follow.

Scrupulous accuracy, intellectual honesty, and disciplined enthusiasm are obvious throughout her book. Although space limitations (imposed for reasons that are not made clear) require the author to use a clipped, Reader's Digest style, none of her statements, which often must of necessity be generalizations, is vague or misleading. Indeed, every statement reveals her broad and deep understanding of background material, and her sound judgment as to just which features are salient.

This book is complete, in that it makes at least some mention of practically every significant aspect of the mental health movement in the U.S. during this century. One might well

raise the question, though, whether a larger book is not needed to do such a large job. Many of the problems cited are treated in too little detail to be fully perceived; many of the controversies mentioned leave the reader wondering what the pros and cons are.

At times, the reader who is unfamiliar with psychiatry and the mental health movement, and who is therefore ignorant of the sources of the author's allusions, will feel that she has sacrificed clarity to conciseness. Nevertheless, such a reader will find much that he does understand, and he will also find a new awareness of the impact of the mental health movement. He will find that the book puts his understanding of this movement, and the problems with which he is daily wrestling, into proportion and perspective. One wonders whether the legislators (who Miss Ridenour says in her preface "hopefully" will find it useful) will bring to it sufficient background understanding to comprehend it clearly, but her avowed principal audience — mental health association people, students and professional workers in medical, social, and behavioral sciences—will surely find it so.

Because this book is written in a smoothly flowing style by an experienced and capable writer it is most readable and one can painlessly learn a great deal. One still wishes, however, that the work had been documented more explicitly to enable him more easily to find the source references. More plentiful and extensive footnoting, and a more formal and extensive bibliography would greatly increase its usability.

This little book, deservedly hailed even in manuscript, by many of psychiatry's contemporary greats, will surely create a hunger for the still unwritten big book whose need is here shown so clearly. This little book would serve as an excellent outline for that big book we need. No one more than our present author combines the interest, the intimate personal experience, the broad knowledge, and the outstanding literary skill needed to write that big book for us.

William F. Sheeley, M.D.

PROBLEMS OF ESTIMATING CHANGES IN FREQUENCY OF MENTAL DISORDERS. By the Committee on Preventive Psychiatry, Group for the Advancement of Psychiatry. Report No. 50, Aug. 1961, 64 pages. 75 cents.

This most recent publication of G.A.P. indicates that mental disorders may change with respect to prevalence, incidence, severity, duration and eventual fate. Social attitudes toward illness change and this may affect the total number of patients who seek help. The methodological problems involved in seeking out these changes are further complicated by the fact that psychiatric diagnoses often vary with the observer; in addition, diagnostic fashions change from time to time as do the tolerance of families and the population in which the patient lives. The report proves that epidemiological research teams can avoid some of these pitfalls. Illustrative disorders were chosen.

Conversion hysteria has decreased in frequency, especially where the population has shown a high degree of cultural sophistication. In the past a conversion symptom was treated with indulgence and was a source of secondary gain; today an unsympathetic environment cuts short its course. In syphilitic psychoses, there has been a dramatic decline. This has been mainly due to the discovery of effective treatment of the disease in its early stages. In psychoses of the aged, including arteriosclerotic psychoses, the Committee felt there had been a definite increase due to the increasing number of people above 65 (3 million in U.S. in 1900; 17 million in 1960). The increased admission rates to mental hospitals may also indicate a decreased tolerance for maintenance of these patients at home. In psychoses associated with pellagra, the decrease has been related to the discovery of the nutritional origin of the disease. In deliria with pneumonia, the decrease has been attributed to the better management of the disease with sulfa drugs and antibiotics As for alcoholic psychoses, no clear-cut conclusions were possible.

It is suspected that cretinism has decreased because of the use of iodized salt. Post-encephalitic encephalopathy is now rare compared to forty years ago, as a result of the epidemic of encephalitic lethargica of 1917. As for bromide psychosis, decrease is questionable. The easy availability of bromide drugs without prescription counteracts the fact that prescriptions for bromides have decreased with the advent of the barbital drugs and the ataractics. Neurocirculatory asthenia is decreasing, due to the lessened frequency with which it is diagnosed. The symptoms still appear, but the diagnosis is now neurosis. As for psychoneuroses with diffuse anxiety as the primary manifestation, this category ranks second only to psychoses of the aged in the degree of increased frequency.

The Committee suggests that improved methods of data collection and analysis will provide more definitive conclusions and eventually enable psychiatrists to obtain leads as to etiology, prevention and management.

This report, just as the others contributed by G.A.P., presents valuable information for all those interested in emotional illness.

W.D.

STERILITY: Office Management of the Infertile Couple. Edited by Edward T. Tyler, M.D. New York: McGraw-Hill Book Co.

Dr. Edward T. Tyler, one of our more notable figures in the field of sterility, has been presenting for a number of years the courses on infertility in the Post-Graduate Extension Division of the U.C.L.A. Medical Center. During the series, clinicians and investigators have presented their views before these post-graduate classes. Dr. Tyler has compiled some of these discussions and lectures in a most attractive and skillful fashion. Among the many notable names in reproductive investigations included within this book is that of Dr. I. C. Rubin whose posthumous presentation is classic. In some four hundred pages the entire field of current infertility knowledge for office practice has been condensed and presented with practical working routines.

Dr. Tyler has shown both sides of the reproductive coin: how to achieve pregnancy on the one side and, on the other, how to achieve conception control. Both are presented in a most useful fashion. Included is completely up-to-date material on culdoscopy—that appealing way of lifting the engine hood to look at the motor within and then to check its function. The problems presented by therapeutic insemination (as artificial insemination is titled currently) are delineated. A consent form prepared by one of the medical societies is given in full for the use of the physician. An interesting and current evaluation regarding the modern progestogens is provided. Psychogenic factors are listed as being of increasing importance in the consideration of the infertile couple, thereby deserving more accurate scrutiny by the physician. Immunological considerations are given and a whole new angle of approach is presented with the description of spermagglutinins. These may account for some hitherto unsolved and obscure cases of infertility.

This book is designed to be used both by the doctor who is only occasionally challenged by the investigation of an infertile couple and by the sophisticated specialist. Dr. Tyler has very modestly included only several of his own lectures in the 22 chapters. Interestingly enough, there is a presentation from one brother, Dr. Albert Tyler, Professor of Embryology at the California Institute of Technology, as well as one by another brother, Dr. David B. Tyler, Professor of Pharmacology and Head of the Department at the School of Medicine and Dentistry, University of Puerto Rico. It would seem that the members of the Tyler family have much to discuss among themselves. This is an extremely valuable and useful book for current practical needs.

Robert N. Rutherford, M.D.